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AUSTRIAN SPECIALIST TROOPS OF THE NAPOLEONIC WARS

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Author's note

Many of the most basic aspects of the Austrian army were covered in the previous Men-at-Arms series titles (176: *The Austrian Army of the Napoleonic Wars: Infantry*; and 181: *Cavalry*), and such universal matters as rank-markings, etc., are not covered again here. Many of the aspects of the uniform of the Austrian artillery and engineer services followed closely (except in colouring) the style and changes of infantry uniform, full details of which will be found in the appropriate title above. Austrian-style spellings have been used where appropriate, e.g. *Oberlieutenant* instead of *Oberleutnant*, etc.

Artist's note

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Austrian Specialist Troops of the Napoleonic Wars

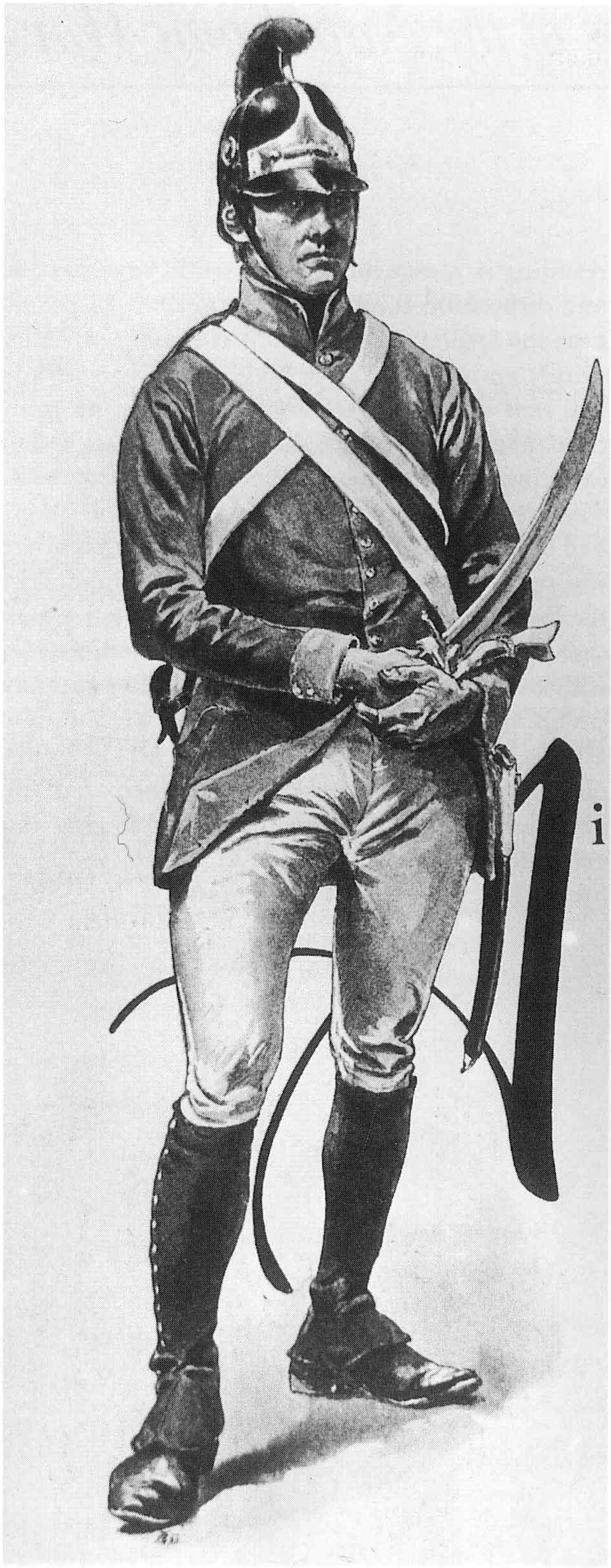
The Artillery

In the later 18th century the Austrian artillery had been the finest in Europe, and was held up as an example to the world. The inferiority of the arm in the War of the Austrian Succession had been the cause of a complete overhaul, dating from the appointment of Prince Liechtenstein in 1744 as Director-General of Artillery. He established the artillery school at Budweis and redesigned the ordnance to produce lighter and more manoeuvrable guns, so that when thus equipped in the Seven Years' War the arm became predominant in Europe, and was imitated by other nations. Prussia adopted the Austrian 12-pdr., and as late as 1803 France copied Liechtenstein's howitzer. Gribeauval himself served in the Austrian artillery from 1756 to 1762 and probably based his overhaul of the French artillery on what he had learned in Austrian service. However, no reforms had been instituted in the later 18th century, so that the artillery was overtaken in quality by that of other nations; and whilst the personnel remained excellently trained they were always too few in numbers, and desperately hampered by the outdated system of tactics which Austria employed in at least the first half of the French Revolutionary and Napoleonic conflict.

Organisation

The organisation of the Austrian artillery was tied closely to the theories of tactical employment, resulting in a sequence of changes in organisation and disposition throughout the period. In peacetime the artillery had no tactical formation, being simply an administrative body which in wartime was sent in small detachments to serve the principal field artillery, the light fieldpieces attached to each infantry and *Grenz* (border infantry) unit. The system, generally known as 'battalion guns', had been prevalent in many European armies; but was recognised by most even as early as the start of the Revolutionary Wars as being of limited use on the battlefield, tending to hinder manoeuvre, which disadvantage outweighed the fire support which such guns could provide to an infantry attack. Britain and France were the first to recognise that 'battalion guns' merely dissipated the firepower of the artillery in opposition to the generally accepted maxim that concentration of fire—often termed 'massed-battery fire'—was

Artillery, 1798. The company officer (left) wears the 1798 helmet with black-over-yellow crest; the brown coat has red facings and lining but is styled without turnbacks at this date. The gunner (right) has the chinstrap of the red-crested helmet fastened around the rear of the headdress, a popular style, and carries a rolled greatcoat and (in the hand) the *bricole*. The driver (centre) has the *Fuhrwesen* uniform in light grey (including breeches) with yellow facings, black and yellow brassard on the left arm and a plain 'round hat' ornamented with the national pompon and yellow-over-black plume. (R. von Ottenfeld)



Gunner, Artillery, 1798. This illustrates the 1798 helmet with its distinctive plate bearing a cannon barrel, and breeches and gaiters in place of the knee-boots. The narrower belt over the right shoulder is the harness for the bricole. (R. von Ottenfeld)

more effective than the sum of its parts. Yet Austria made little attempt to centralise their artillery effort until well into the 19th century, as the 'support' or 'position' batteries—in effect the artillery reserve—initially formed only a minor part of the army's ordnance.

In 1792 the artillery comprised a headquarters organisation of 270 of all ranks, three field artillery regiments of 9,282 men in total, 13 garrison artillery districts comprising 2,166 men, the *Bombardeur Corps* of 845 men, and the Artillery Fusilier Battalion of 959 men. The guns with which these corps were equipped were cannon of 3-, 6-, 12-, 18- and 24-pdr. 'nature', 7- and 10-pdr. howitzers, and 30-, 60- and 100-pdr. Coehoorn mortars. Some of the heavier pieces were iron, but the majority were 'brass'. Though once the equal of any in Europe they were now outmatched even weight-for-weight by the equivalent French pieces, as Austrian guns were calculated in respect of a lighter 'pound'; the 'Vienna pound', for example, weighed 0.83 of an English pound, whereas the French 'pound' weighed 1.068 of an English pound. Thus, a 12-pdr. roundshot calculated in Vienna measure would weigh 9.96 English pounds, and the equivalent French shot 12.81 lbs.—a French superiority of 22.25 per cent over the Austrian shot of the same nominal weight.

The allocation of guns to infantry units varied; each battalion was supposed to receive two 3-pdrs. in Italy and the Tyrol and two 6-pdrs. in Germany and the Netherlands, with a regimental reserve of three guns, usually 12-pdrs. and howitzers. The *Grenz* units normally received four 3-pdrs. per three battalions, and appear to have used their own personnel as gunners, 50 men per regiment. In the ordinary infantry each gun had a small crew of specialist gunners, with the 'muscle' for positioning of the guns being provided by men detached from the infantry battalions, quite outside the organisation of the artillery.

In battle the artillery was distributed with the infantry along the battle-line; the artillery reserve was normally allocated a position before the action and usually was not moved during the battle. The 'line guns' were normally dragged about 15 yards ahead of the infantry line, firing after the infantry had delivered a volley; on occasion the 12-pdrs. and 10-pdr. howitzers might be added to the line

to add weight—a tactic tried with some success in the War of the Bavarian Succession (1778–79 against Prussia) and repeated during the French war; yet the dilution of fire rendered the artillery greatly inferior.

The 'position' batteries were generally of four guns and two howitzers, manned by personnel of the Bombardiers, Artillery Fusiliers and men detached from the Garrison artillery as well as from the field regiments. Part of the 'light reserve' were the mobile 'cavalry batteries' (*Cavallerie Batterien*), which were armed with light 6-pdr. guns but were not horse artillery in the accepted sense. Introduced in 1778, these batteries were intended to improve mobility but not specifically to accompany cavalry; the nomenclature was as much about the guns requiring cavalry support as vice-versa. Their personnel were taken from the ordinary field artillery, and did not form a separate branch of service. The guns with which they were equipped had lengthened trails equipped with a padded seat upon which the gunners rode. Their ammunition caissons similarly had padded tops, where the remainder of the gun-crew sat, and were known from their shape as *Würst-Wagens* or 'sausage-waggons'. Only the officers and some NCOs were mounted in these batteries (originally it was thought that if each gunner had a horse there was more chance of him running away!); and as the vehicles had to carry the weight of the entire gun-crew their rate of mobility was inferior to that of proper horse artillery. (The use of these *Cavallerie Batterien* reflects the decline of the cavalry from the shock arm it had been in the mid-18th century to basically a support arm: the batteries were not trained to support cavalry charges, being restricted to the speed attainable by the caissons, and were used basically as field artillery.)

For both cavalry and ordinary ('foot') batteries the drivers were provided by the army transport service (*Fuhrwesencorps*) which was also responsible for commissariat vehicles, an expedient adopted in many European armies but which, in separating the drivers from the artillery organisation, was most unsatisfactory. Prior to 1805 artillery batteries lacked horses and had to requisition draught-teams before a campaign.

The standard of recruit required by the artillery was higher than that of the infantry, given the specialised skills required. Though the standard was relaxed during the wars (the height-limit was lowered, for example), personnel were only admitted if they were fit, literate in German and were Austrian subjects. Gunners were trained at the Artillery School, near Budweis in Bohemia, and in the *Bombardeur Corps* formed by Prince Kinsky, Director of Artillery, in 1786. This unit provided both theoretical and practical instruction for officers and other ranks. The seven-year course included not only the techniques of artillery-handling and tactics but also mathematics, surveying, fortification, administration and science. Those completing the full course were commissioned; those who completed five years' study became NCO gun-captains, and were eligible for promotion. This education resulted in the Austrian artillery personnel being regarded as the best in Europe. The original lifetime enlistment was

Artillery, c.1809. (Left) NCO in a brown coat, double-breasted and short-skirted like an officer's *Oberrock*; this version has the regulation red collar and brown cuffs, unlike the variety with red cuffs. The yellow hat-lace, cane and black and yellow sword knot are the usual NCO distinctions. (Centre) Gunner equipped with a leather satchel in place of the 'holster'; the *bricole* is still carried. Both wear the knee-boots with square-cut tops. (Right) Driver of the *Fuhrwesen* in a white uniform with yellow facings; he wears the infantry-style shako with yellow and black pompon and brass insignia; though privates were not usually armed, those crewing artillery vehicles are sometimes depicted with sabres. (R. von Ottenfeld)

modified by the Archduke Charles in 1802, though the artillery and technical troops still had a longer term of enlistment because of their additional training: against the 10 years' infantry service and 12 years' cavalry, artillery and technical troops served 14.

The artillery headquarters organisation was the *Feld-Zeugamt* or arsenals administration, founded in 1772, originally composed of a staff and two companies, reorganised in 1791 with 270 men, increasing to 465 in 1802. Personnel were recruited from craftsmen (blacksmiths, carpenters, etc.), commanded from 1800 to 1818 by *Major-Oberst* Adolph Geiger. The *Feld-Zeugamt* was responsible for the service and repair of ordnance and vehicles; its personnel were attached to the artillery reserve and depots, for repair and distribution of ordnance and ammunition. The *Feld-Zeugamt* had its headquarters in Vienna but its depots were spread throughout the empire; the original main stations were Vienna (central park for siege-train and depot for the southern provinces), Budweis (main testing-centre for ordnance, and for service of the artillery reserve and attendant waggons), Prague (for service of the artillery in Bohemia) and Brunn (for Moravia).

The Garrison Artillery organisation was based upon 'districts' (*Garnisons-Artillerie-Distrikte*), of which the number varied slightly—with losses or acquisition of territory, such as the loss of the Netherlands—which were first established in 1772. These were basically Upper and Lower Austria (based at Vienna, where the Garrison Artillery Headquarters was situated); Inner Austria (Graz); Bohemia (Prague); Moravia (Olmütz); Hungary (Ofen); Banat (Temesvár); Slavonia (Peterwardein); Croatia (Carlstadt); Transylvania (*Siebenbürgen*, the base initially at Hermannstadt, transferred to Carlsburg in 1794); Tyrol (Innsbruck, lost after 1805); Netherlands (Mecheln, lost after the Netherlands campaign); Italy (Mantua, lost 1797, reformed 1799 and lost in 1800); Galicia (Lemberg); Venice (Venice, formed 1798); and Dalmatia (Zara). An additional district existed briefly in 1793–94, based at Valenciennes after its capture from France.

The personnel of the Garrison Artillery was formed partly of gunners, recruited from the 2nd Artillery Regt. (based at Vienna), disabled members of the field artillery and those no longer sufficiently strong to take the field, and from *Zeug* personnel, basically civilian craftsmen who

Drummer, Artillery. Musicians of the artillery and technical services wore uniform distinctions akin to those of infantry musicians: the ordinary uniform with the addition of scalloped lace on collar and cuffs, and 'swallows'-nest' wings edged with the same lace and with a rosette in the centre. This depicts the *Corséhut* of post-1811 style. (R. von Ottenfeld)

worked on the manufacture of artillery, small arms and powder. In 1801 the strength of the Garrison Artillery was 1,971 gunners and 1,113 artisans.

As noted above, the *Bombardeur-Corps* was used partly as a training school and partly to provide the most skilled gunners to the field artillery; in the field they were attached especially to the siege-train, artillery reserve and howitzers. The corps was formed on 1 November 1786 with a staff and four companies (the personnel of which were employed piecemeal, as and when required), commanded by an *Oberst-lieutenant* (lieutenant-colonel), or an *Oberst* (colonel) 1808–12, in the person of Joseph Smola, under the general command of the field artillery; its headquarters was Vienna.

Its staff comprised the *Oberst-lieutenant*, two majors, one instructor (of artillery theory: a *Hauptmann*), two *Oberfeuerwerkmeisters* and three *Feuerwerkmeisters* (commissioned ranks equating with subalterns; the unusual title was similar to the British 'fireworker' used at the same time for the same type of artillery technician). The staff was enlarged in 1801 when a fifth company was formed. Company strength comprised a *Hauptmann* (captain), an *Ober-lieutenant*, two *Unter-lieutenants*, 24 *Oberfeuerwerkers*, 36 *Feuerwerkers* (NCOs), six cadets, one *Fourier* (quartermaster) and one assistant (*Fourierschutzen*), two musicians and 131 bombardiers. The main instructional depot was at Simmering, commanded by an *Oberfeuerwerkmeister*. When deployed in the field the ordinary bombardiers automatically took command of their gun teams as gun-captains; *Feuerwerkers* could command sections of howitzers or even batteries.

The Artillery Fusilier Battalion, which had existed in the earlier 18th century but which was disbanded in 1772 (its personnel going to the 3rd Field Artillery), was originally intended to provide the untrained labour required for those guns which were not permanently attached to infantry regiments (which provided their own labourers). In 1790 the unit was re-established with a staff and six companies, the staff comprising an *Oberst-lieutenant*, a major, a chaplain, an *Auditor* (senior clerical officer), a *Rechnungsführer* (accountant), a surgeon-major, a battalion surgeon and four assistants, a provost and a drummer; each company comprised a Captain, an *Ober-lieutenant*, an *Unter-lieutenant*, a *Feldwebel* (sergeant-major), a *Fourier* and an assistant, six corporals, two drummers, 100 privates and four servants; company strength was

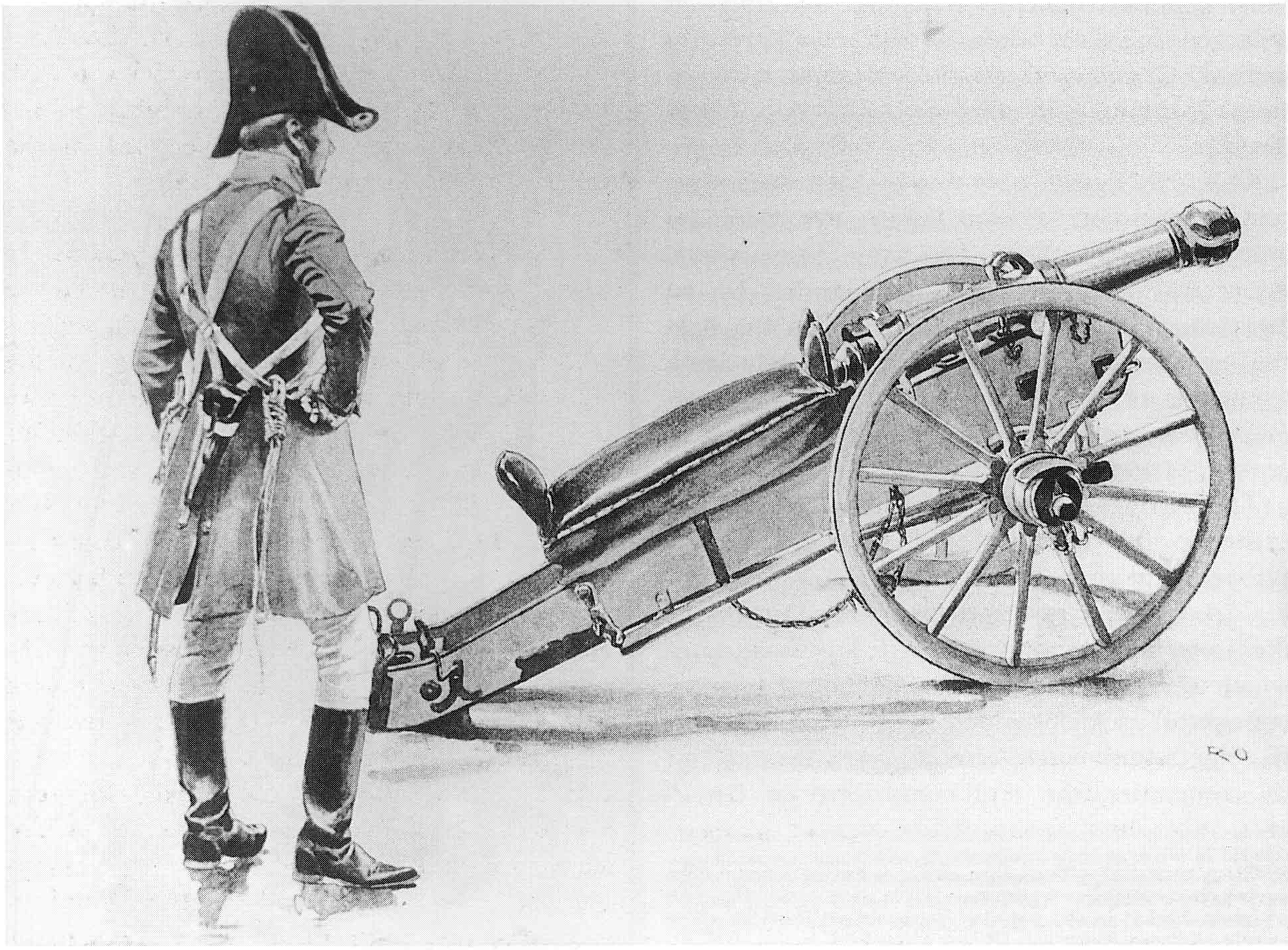
Artillery company officer, in a uniform dating from c.1813, having the coat-skirts in the later style with turnbacks, and wearing the hat in the popular 'fore-and-aft' fashion often seen in pictures of this era. (R. von Ottenfeld)

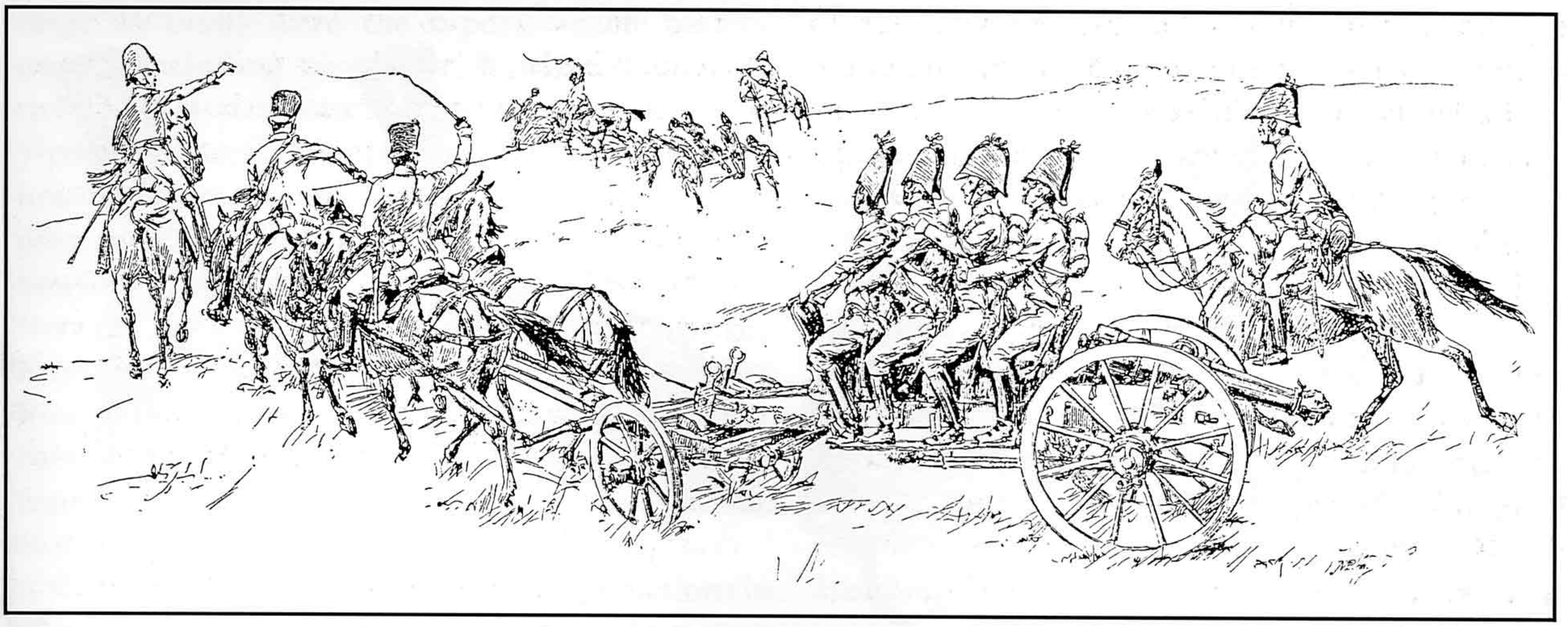
expanded in wartime. The battalion was used to assist the artillery in Bohemia, Moravia and in the Netherlands. It was disbanded again in 1802, its personnel being transferred as appropriate to the *Feld-Zeugamt*, the Garrison Artillery or to the new 4th Field Artillery.

The main body of the artillery was the three, later four regiments of Field Artillery, which from 1807 were given 'territorial' designations. These originated with the reorganisation of the whole artillery service on 1 May 1772, the personnel being taken from the previous field artillery corps, the Netherlands Field Artillery Regt. and the Artillery Fusilier Battalion. The three new regiments each comprised four battalions of four companies each,with new companies being added to each regiment in 1790, 1796 and 1797.

Gunner of a 'Cavalry Battery' wearing the thigh-length, *Oberrock*-style greatcoat (with *bricole* over the shoulder); with the unique 6-pdr. *Cavalleriegeschütz*, showing the extended trail with padded seat upon which the gunners sat. The muzzle has a waterproof cover and a similar plug covers the touch-hole. (R. von Ottenfeld)

The 1st Field Artillery Regt. (from 1807 the Bohemian Regt., *Böhmisches Feldartillerie-Regiment*) was increased to 22 companies in 1801; in 1802 six companies were detached to help form the new 4th Regt., and two additional companies were formed in 1815. The 2nd Field Artillery Regt. (from 1807 the Lower Austrian Regt., *Niederösterreichisches Feldartillerie-Regiment*) stood at 20 companies in 1797, and detached four companies in 1802 to the new 4th Regt.; one additional company was formed in 1815. The 3rd Field Artillery Regt. (from 1807 the Moravian Regt., *Mährisches Feldartillerie-Regiment*) similarly detached four of its 20 companies in 1802 to form the 4th Regt.; and two extra companies were formed in 1815. The 4th Field Artillery Regt. (from 1807 the Inner Austrian Regt., *Inner-Österreichisches Artillerie-Regiment*) was raised on 1 February 1802 from the aforementioned companies detached from the first three regiments and the disbanded Artillery Fusilier Bn., bringing its strength to 16 companies; it was augmented by two extra companies in 1815. (In





A 'Cavalry Battery', of 6-pdrs. with elongated trails and padded seat to accommodate four gunners; the drivers wear the 'new' *Fuhrwesen* uniform of post-c.1809, including the shako. (R. von Ottenfeld)

1815 the 17th and 18th companies of the 4th Regt. formed the basis of a new 5th Field Artillery Regiment.)

These units did not serve as regiments in the field, companies being semi-independent entities distributed individually. A typical disposition is that of the 2nd Regt. in 1809: six companies with the army of the Archduke John in Italy, three at Vienna, two with the army of Archduke Charles in Germany, two at the regimental depot at Pest, one company in Hungary, one in Graz and one in the Tyrol.

Regimental staff comprised the *Inhaber* or colonel-proprietor, a ceremonial appointment; the *Oberst* (colonel) in command, an *Oberst-lieutenant*, three majors, a chaplain, an adjutant, an *Auditor*, a *Rechnungsführer*, a regimental surgeon, four battalion surgeons, nine assistant-surgeons, a drum-major, eight musicians and a provost.

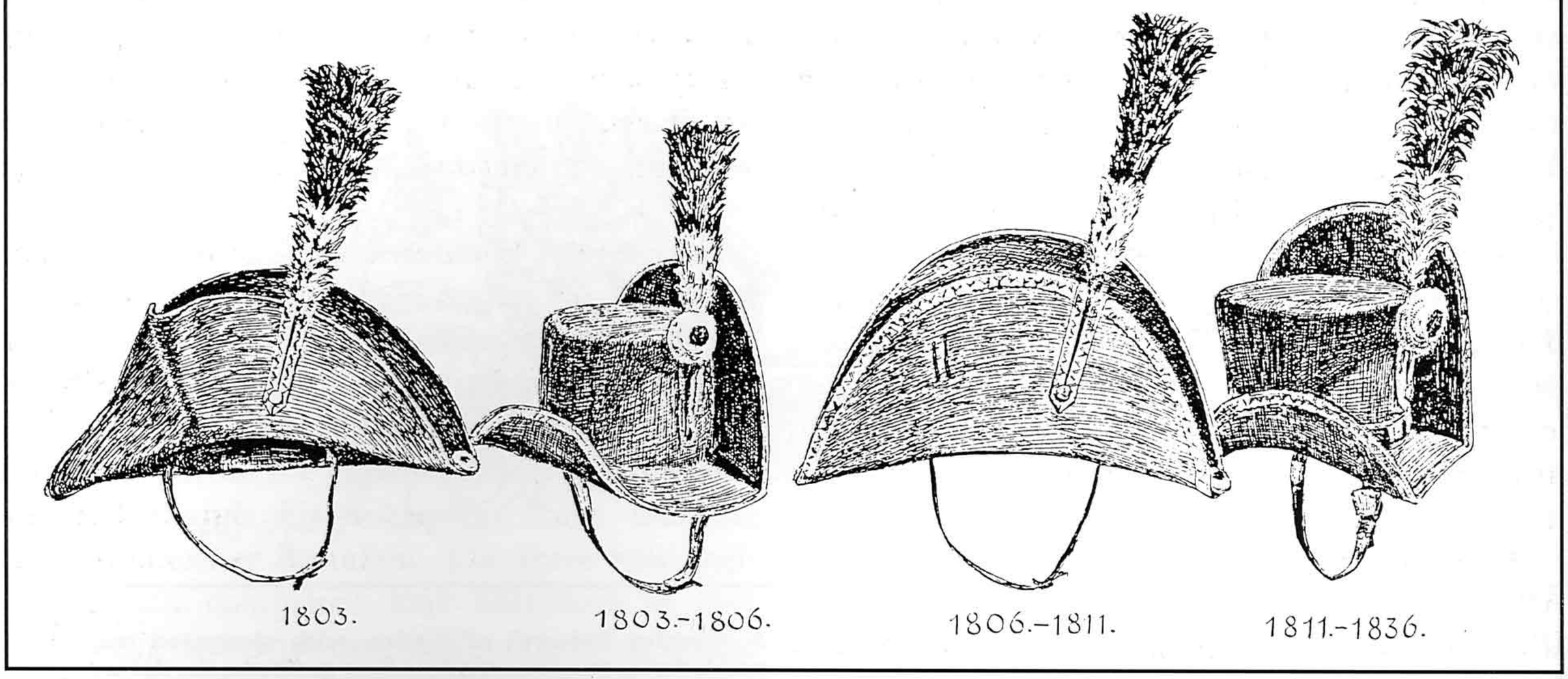
A company was composed of a captain or captain-lieutenant in command (12 captains and six captain-lieutenants to an 18-company regiment), an *Ober-lieutenant*, two *Unter-lieutenants*, a *Feldwebel*, a *Fourier* and an assistant, 11 corporals, 100 *Cannoniers* (1st class gunners), 50 *Unter-cannoniers* (2nd class gunners) and two musicians.

These figures varied: for example, company-strength was 174 in 1802, 170 in 1811, and 177 in 1813–15; staff increased from 31 (1802) to 43 (1811–15). Regimental establishment was 2,815 in 1802, 2,763 in 1811, 2,875 in 1813 and 3,229 in 1815, the latter higher figure resulting from the increase to 18 companies.

Gun-crews varied in strength according to the 'nature' of the gun: a 3-pdr. required four gunners and four labourers (*Handlanger*); a 6-pdr., four gunners and six labourers; a 6-pdr. *Cavallerie-geschutz*, six gunners; a 12- or 18-pdr. four gunners and eight labourers; and a howitzer, two bombardiers, two gunners and seven labourers. Until 1808 the labourers were drawn from the infantry battalion to which the gun was attached, or from the Artillery Fusiliers for the reserve artillery.

Reorganisation and tactical employment

The progressive reorganisation of the artillery was occasioned by the changing theories of the preferred tactical employment, which were against the dissipation of effect by the attachment of guns to infantry battalions, and towards the more effective concentration of fire. Concentration was advocated by Archduke Charles as early as 1795, but despite its obvious advantages it was a considerable time before anything akin to 'massed battery' fire was practicable, even with the reserve artillery which should have been ideal for this purpose. At Austerlitz, for example, it was only by accident that Major Frierenberg's train of 12 guns reached the field at a critical time and was able to act as a 'massed battery'. Though the number of guns possessed by Austria was considerable, the lack of effectiveness occasioned by injudicious employment was made worse by inferiority in numbers when compared with those of the French: at



Artillery headdress, showing the changing style of bicorn and *Corséhut*. It should be noted that despite the dates which accompany the illustrations, the use of these hats was not so clearly defined; the bicorn, for example, continued in use to the very end of the Napoleonic Wars. (R. von Ottenfeld)

Wagram, for example, using the contemporary statistical guide of 'guns per thousand men', the French ratio was 3.6 guns per thousand (554 guns to 154,000) whilst the Austrian was but 2.9 (414 to 142,000).

For the 1805 campaign the establishment was still inadequate, totalling 11,260 artillery personnel with manual effort still provided by untrained infantrymen, and dependent upon teams requisitioned as and when required. As a result the artillery embarked on the 1805 campaign with only just over half its field establishment. Ordnance was still divided into 'line guns' to furnish close support and 'reserve guns' under central direction; although most infantry brigades received a 3-pdr. battery, the cavalry brigades lost their guns.

The defeat of 1805 caused a more radical review, but although Archduke Charles pushed through some reforms in 1808 shortages of personnel, absence of transport and permanent tactical formations still left the Austrian artillery unequal in efficiency to the French. Charles gradually withdrew the battalion guns as the first step towards achieving concentration of fire; the 3-pdrs. were combined into eight-gun 'brigade' batteries, and the 6-pdrs. consigned to the artillery reserve. The withdrawal from the infantry necessitated the replacement of the infantry labourers with a new artillery unit, the *Artillerie-Handlanger-Corps*, eight companies strong (increased to eight battalions upon mobilisation), to serve with both the brigade batteries and with the artillery reserve.

The *Handlanger-Corps* was formed on 16 June 1808 from officers and NCOs of the artillery and privates from the 'German' infantry regiments; there were four 'divisions' of two companies each, the station of these 'divisions' in 1813 being Vienna (with the corps headquarters), Graz, Olmütz and Prague. One 'division' was attached to each of the existing artillery regiments, one company being sufficient to crew three batteries. Company strength was a lieutenant, a *Feldwebel*, eight corporals, 170 privates and a servant; headquarters comprised 16 officers, NCOs and servants, with *Oberst-lieutenant* C. F. Maresch von Marsfeld as commandant.

The *Handlanger* service expanded as necessary, though in 1812 the original eight companies were sufficient (five with Schwarzenberg's Auxiliary Corps of the *Grande Armée*, two at Vienna and one at Theresienstadt); by 1813 there were 30 field companies, and in 1814 33 field companies with an establishment of 7,157 but an actual strength of under 6,000. The corps was disbanded on 1 August 1816.

Archduke Charles also reorganised the artillery reserve into 'support' and 'position' batteries, generally with six guns each unlike the eight-gun brigade batteries. The support batteries (*Unterstüt-*

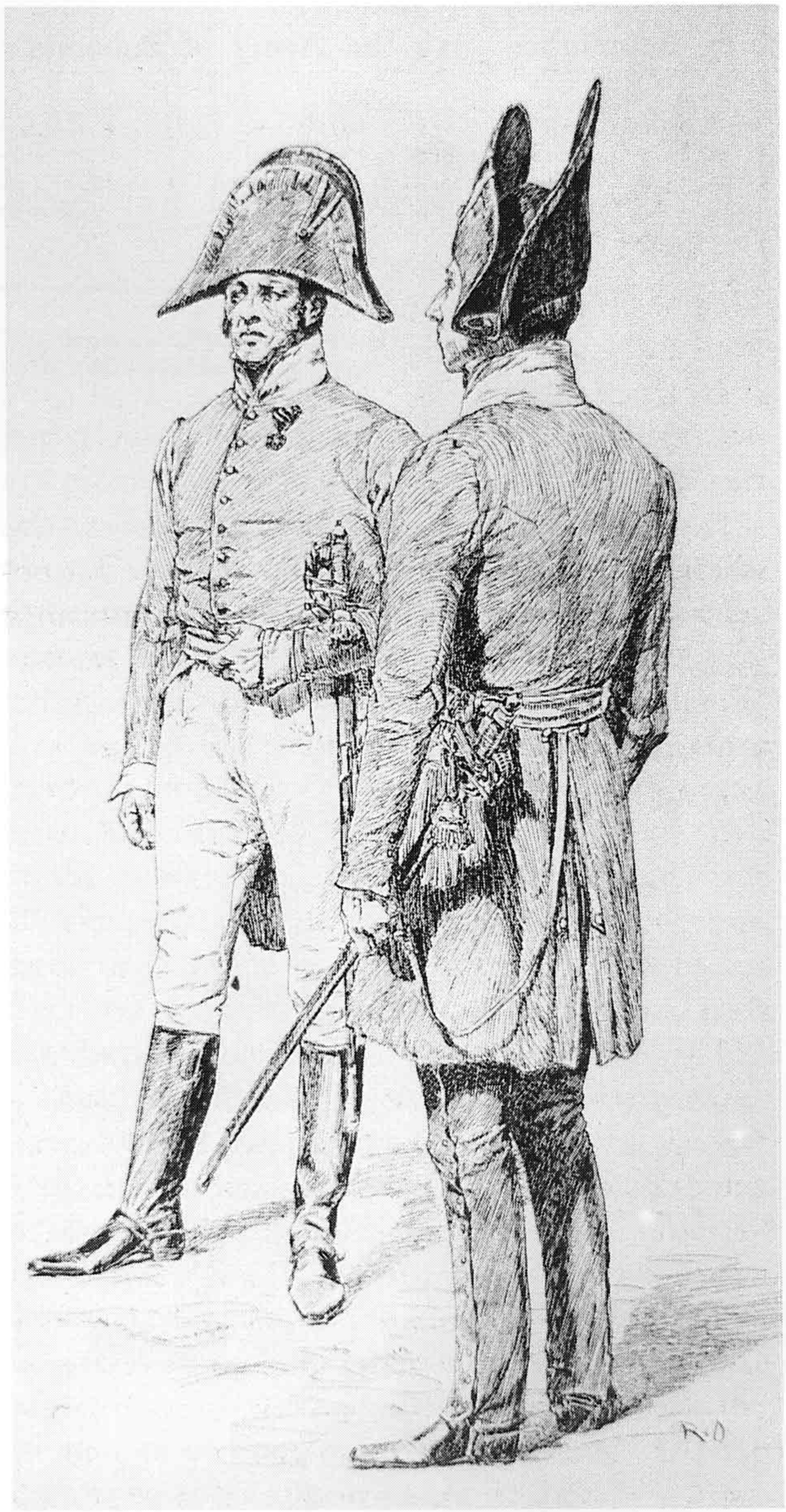
zungs Batterien) were the 6-pdrs. (each battery usually including two 7-pdr. howitzers) and the cavalry batteries (four light 6-pdrs. and two short 7-pdr. howitzers); the position batteries were the heavier pieces, usually four 12-pdrs. (with some 6-pdrs. and occasionally 18-pdrs.) and two 7-pdr. howitzers per battery. Only officers and NCOs were mounted. Transport was still provided by the *Fuhrwesen-Corps*, but it was militarised for the first time and its officers received parity with other commissioned ranks; and from late 1808 the transport cadres were kept permanently attached to their batteries.

Charles introduced new artillery instructions in 1809, but these made little difference to the system already in use; it was remarked that artillery was most effective when several batteries were assembled together, but there was no directive that this *had* to be attempted. Although from 1809 each Corps commander had a senior artillery officer attached to his staff, too few were sufficiently innovative (caused in part by the slowness of promotion within the artillery service, resulting in elderly senior ranks) to appreciate in full the importance of integrating artillery into combined operations of all arms. In 1809 a Corps system was operated, the artillery divided into brigade, cavalry, and support or position batteries. Each brigade had a 3- or 6-pdr.battery and most cavalry brigades a 6-pdr. cavalry battery; each division normally had a 6-pdr. support battery held at Corps level, which with the two or three 12-pdr. position batteries of the Corps reserve were under direct control of the Corps artillery commandant. Battery organisation in 1809 was generally as follows: *Brigade battery*: 8 guns, 8 two-wheel ammunition-carts, 2/3 baggage-waggons, 32 gunners, 32 *Handlanger* (for 3-pdr. battery: 48 for 6-pdrs.) *6-pdr. Support battery*: 4 guns, 2 howitzers, 2 two-wheel ammunition-carts, 6 four-wheel ammunition waggons, 3 baggage-waggons, 20 gunners, 46 *Handlanger*.

Cavalry battery: 4 × 6-pdrs., 2 howitzers, 2/3 two-wheel ammunition-carts, 24 pack-horses, 6 forage-waggons, 2 baggage-waggons (optional) and 1 *Feuerwerkskasten* ('fireworker's waggon'; optional), 32 gunners. *12-pdr. Position battery*: 4 guns, 2 howitzers, 3 or 6 four-wheel ammunition-waggons, 3 baggage-waggons, 20 gunners, 46 *Handlanger*.

The 7-pdr. howitzers, ammunition-carts and baggage-waggons generally had teams of two horses each; 6-pdrs. and ammunition-waggons four horses; and 12-pdrs. six horses. *Fuhrwesen* personnel were in addition to the above.

After the defeat of 1809 the four artillery regiments were kept in existence, but the *Handlanger-Corps* was reduced to a cadre. The



Artillery officers, c.1815, showing the 'ordinary' uniform (left) and the popular 'campaign' uniform of *Oberrock* (with facing-coloured collar) and overalls. The officer at left wears the Military Decoration of 1814; and though both wear the hat 'athwart', contemporary pictures show the fore-and-aft style to be equally popular by this date. (R. von Ottenfeld)

Corps system was abandoned, so that for 1813 the Army of Bohemia was organised into a 'left wing' and 'main body', but by that September it was found necessary to reintroduce something akin to a Corps system, though not officially so called—the formations officially styled *Armée Abtheilungen* were referred to for convenience as 'Corps'. The army's artillery comprised initially 52 batteries, three of 3-pdrs., 36 of 6-pdrs., 11 of 12-pdrs. and two of 18-pdrs., thus exemplifying the intention to increase the weight of shot by progressively discarding the 3-pdrs., as already accomplished by many other armies. Brigade batteries continued to have eight guns, and position batteries four guns and two howitzers, usually 7-pounders.

By September 1813 the Army of Bohemia's artillery organisation had enlarged as follows (with the term 'Corps' used for convenience): *Advance Guard:* 2 × 6-pdr. horse, 2 × 3-pdr. brigade batteries. *I, III and IV Corps*: 4 × 6-pdr. brigade, 1 × 6-pdr. horse, 1 × 6-pdr. position and 2 × 12-pdr. position batteries. *II Corps*: 1 × 3-pdr. and 3 × 6-pdr. brigade, 1 × 6-pdr. horse, 1 × 6-pdr. and 2 × 12-pdr. position batteries. *Army Reserve*: 4 × 6-pdr. brigade, 4 × 6-pdr. horse batteries. *Artillery Reserve*: 1 × 3-pdr. brigade, 5 × 6-pdr. horse, 2 × 6-pdr., 4 × 12-pdr. and 2 × 18-pdr. position batteries.

The attempt to concentrate fire by 'massed batteries' was supported by instructions issued by Schwarzenberg in August 1813, stating that guns should be advanced as far as possible though never left uncovered, and that ideally several batteries should be combined under the direction of the senior artillery officer available. Nevertheless, the British observer Sir Robert Wilson believed that at this time the general standard of the Austrian artillery had declined.

Typical battery-organisation in 1813 was as follows:

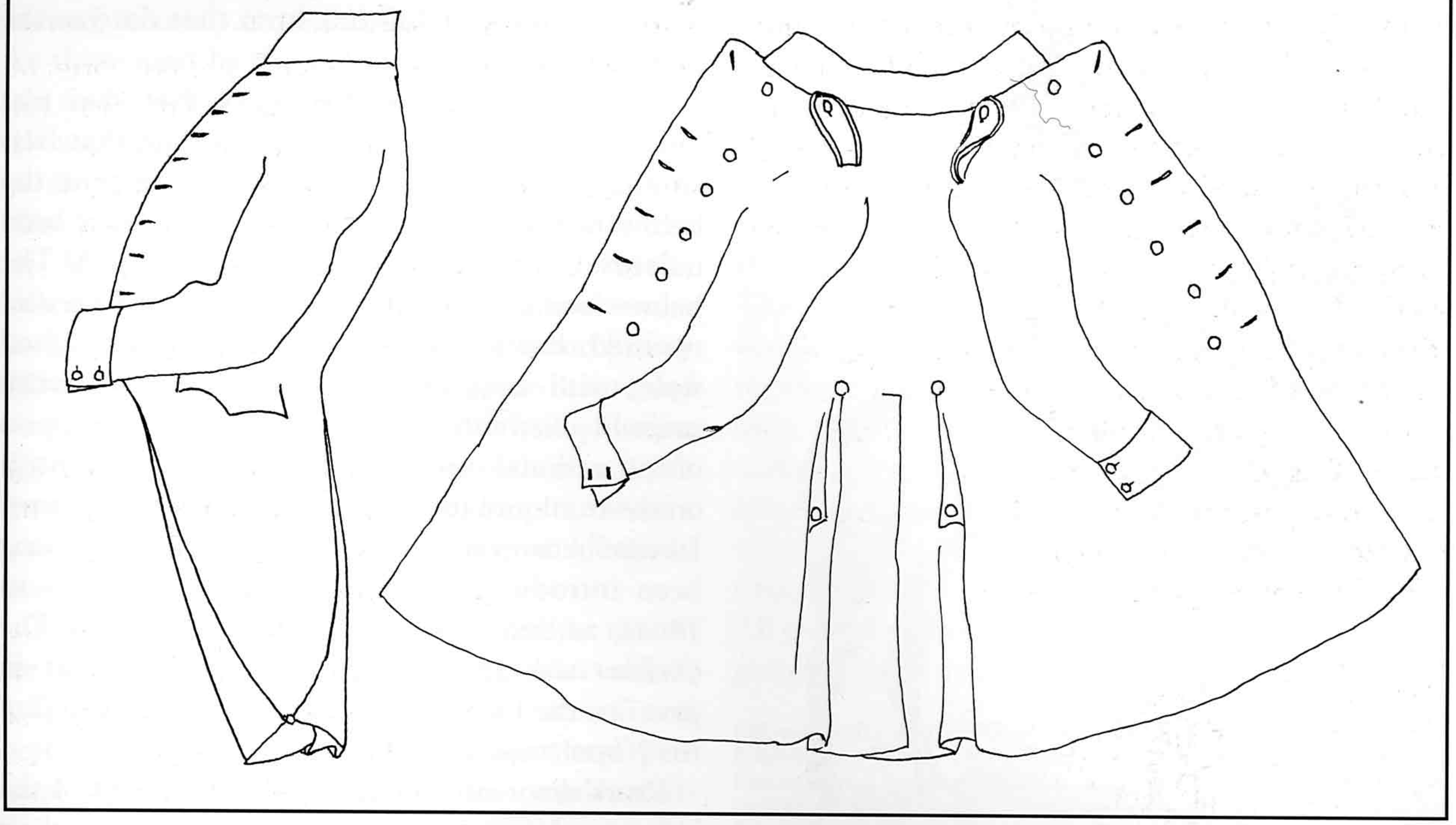
Brigade battery: 6 guns, 2 × 7-pdr. howitzers, 8 ammunition-waggons, 3 baggage-waggons, 1 commander (officer or *Feuerwerker*), 4 NCOs, 34 gunners, 54 *Handlanger*. *Position battery*: 4 guns, 2 × 7-pdr. howitzers, 6 ammunition-waggons, 3 baggage-waggons, 1 commander (officer or *Oberfeuerwerker*), 4 corporals, 6 *Vormeisters* (*Feuerwerkers* or Bombardiers), 4 Bombardiers, 46 gunners, 44 *Handlanger* (54 of each for 12-pdrs.)

In addition to the more conventional artillery, Austria was one of only two nations (the other was Britain) to employ the Congreve rocket, from 1808: 6- or 12-pdrs. for field service and heavier ones for siege or bombardment work.

Artillery Uniforms

The Austrian artillery uniform basically followed the style and alterations of that of the infantry: short single-breasted jackets for the rank and file and long-tailed coats for officers. The main distinction of the artillery was in the uniform colour,

A 'craftsman' of the artillery, carrying carpenter's equipment in the leather apron with pockets, sheathed saw and felling-axe; the greatcoat is carried rolled and slung diagonally across the back. (R. von Ottenfeld)



The brown artillery coat as worn by *Munitionärs*, c.1803 with red collar, cuffs and turnbacks, and brass buttons.

The brown artillery greatcoat, c.1803 with red collar, brown cuffs and shoulder straps piped red, and brass buttons.

which throughout the period was brown with red facings. The exact shade of brown, however, as with many Austrian uniform colours, is difficult to determine precisely for a particular year. It is usual to describe the colour as 'roe-deer brown', a warm, medium-light brown shade; but earlier descriptions refer to 'wolf-grey', a greyish-brown colour encountered as late as the uniforms of 1803. In common with most uniforms, it is likely that exact colour-matches could not be achieved on every occasion, and the discolouration which would occur in use further reduces the precision with which the uniform colours can be rendered.

Despite the change in style of uniform, following that of the infantry (principally a re-styling in 1798 with shorter turnbacks, and a further slight reduction of turnbacks in 1808), colouring and distinctions remained basically unchanged throughout. The short-tailed jacket of the rank and file had a plain red collar, round cuffs and turnbacks (the colour was described initially as 'poppy-red'), with shoulder straps of the coat colour piped red, and red piping on the rear vents and around the vertical (or diagonal) pockets. It is stated that from 1808–09 the number of buttons on the breast of the jacket was reduced from ten to six, but contemporary pictures show that this change was not universal: ten-button jackets are shown in use as late as 1814. On the pocket was borne one button, later three; two at the rear of the waist above the vents, and one on each shoulder-strap. Two buttons were borne at the rear seam of the cuff for all except the Garrison Artillery and *Zeugamt* personnel. Buttons were gilt for officers, without decoration; for other ranks the buttons were brass, bearing the number in the case of field artillery regiments, 'G' for Garrison Artillery, 'Z' (*Zeugamt*), 'B' (Bombardiers) or plain for the Artillery Fusiliers. Bombardiers and munition-workers did not have red cuffs like the remainder.

Legwear was similar to that of 'German' infantry: white breeches with black gaiters for the Artillery Fusiliers, and usually black knee-boots for the field artillery; overall-trousers are rarely depicted in contemporary sources, though they are shown c.1813 in the same brown shade as the jacket. Black gaiters and low boots appear in use as late as 1815 (in Genty prints executed during the occupation of France, for example), and latterly some knee-boots appear in contemporary sources

An officer of the *Fuhrwesen*, c.1800 depicted with the horse-furniture used during this period. This consisted of a red shabraque edged with the usual yellow or gold lace with black centre, and imperial cypher in the rear corners, with a black sheepskin saddle cover. Although this man wears the lace hat-band of field ranks, no appropriate rank-lace is worn on the yellow cuffs of the grey coat. The black centre of the hat-pompon bears the gold 'F.II' cypher used by officers. (R. von Ottenfeld)

with slightly cut-away rear tops. Waistcoats were brown.

The headdress of the artillery was initially the *Corséhut* or 'Corsican hat', basically of the style worn by *Jägers*, but its appearance changed quite considerably over the period and alternated with other forms of headdress. In its earliest pattern it resembled the 'round hat' worn by a number of European armies in the 1790s: a black felt construction with a low crown, sometimes slightly rounded, with a wide brim turned up at one side or at the back, the upturned brim usually ornamented with the black and yellow national cockade, secured by a yellow lace loop and brass button, the edges of the hat sometimes bound with black tape or leather, and on occasion bearing the black-over-yellow national plume. Throughout the period, it was usual for the *Feldzeichen* to be carried in the headdress, a sprig of green foliage imitating the

'field-sign' of the 17th century and a feature of Austrian military uniforms from that date to the present century.

In 1798 the infantry helmet of that year was introduced, but it is interesting to note that hats continued to be mentioned during the time the helmet was worn, so that its use cannot have been universal; it is described in the text to Plate A. The helmet was discontinued in 1803 and the *Corséhut* restored, but progressively of a more formalised style, with upturned left brim, an appearance more blocked into shape, with a woollen pompon of the national colours (yellow with black centre) on the front and the same black and yellow plume. In 1806, however, the bicorn was specified (having been introduced at least for NCOs as early as 1802), as described in the text to Plate D. The *Corséhut* was restored officially in 1811, but in practice the bicorn continued in use to the end of the Napoleonic Wars.

Rank distinction basically followed that of the infantry. NCOs had silver lace edging to their *Corséhut*; *Oberfeuerwerkers* had officers'-style uniform, but *Feuerwerkers* the long coat like the *Oberfeuerwerker* but with breeches, gaiters and the *Corséhut*. Munition-workers (*Munitionärs*) wore breeches and knee-boots, but had no corner-bosses on their hats and no sword-knots. These three ranks carried sabres, but unlike the rank and file usually suspended them from a waistbelt. *Feldwebels* wore uniform like that of the gunners, but with the usual *Prima Plana* distinctions. In 1802 it was ordered that NCOs, *Fouriers* and surgeons should wear larger bicorns of better-quality felt, with gold loop, 10-in. feather plume and two corner-pompons. Among accounts detailing artillery uniforms are noted hats with gold loops for NCOs and woollen loops for the remainder, brown waistcoats, and grenade-badges for wear upon the shoulder belts of the Bombardiers.

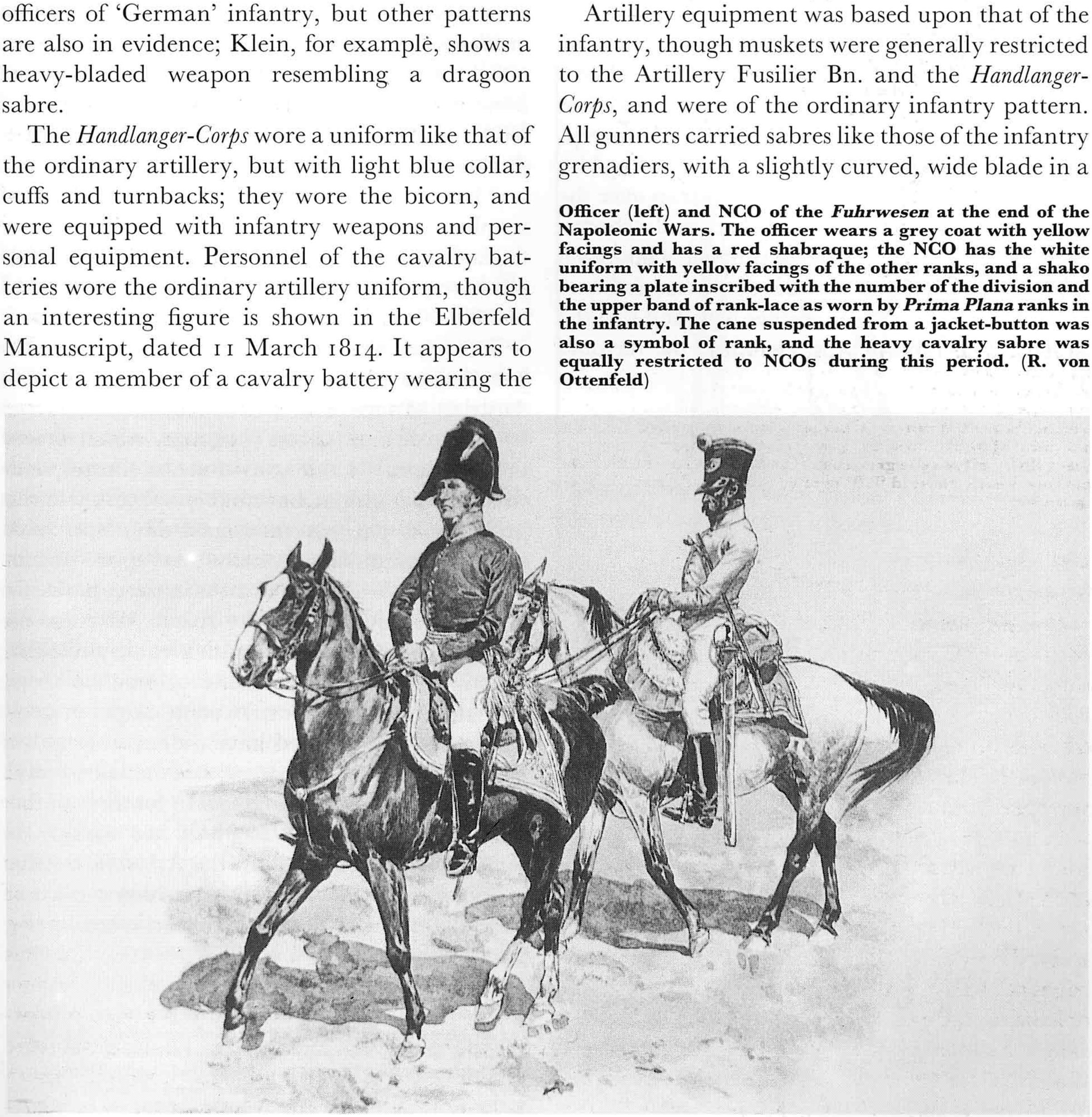
Officers' uniforms followed the style of the infantry, long-skirted coats being worn in place of the short-tailed jacket of the other ranks, in the artillery colouring and with the same distinctions as used by the infantry: no epaulettes or any differentiation between the various grades of commissioned rank, save for gold lace edging upon the cuffs of field officers. (J. A. Klein, however, shows a most unusual uniform which includes a short-

tailed jacket with heavy epaulettes and an officer's plumed bicorn.) Other distinctions of rank were like those used by the remainder of the army: the gold and black waist-sash (*Feldbinde*), black waist-belt with gold lace stripes and gilded eagle-plates for field ranks, in white leather for company officers; and gold and black sword knot. Although the Austrian officer's coat was made officially without turnbacks, latterly at least turnbacks were worn, coloured red like the collar, cuffs and lining. Officers wore white breeches and knee-boots, and were armed with an *épée* like that carried by fusilier officers of 'German' infantry, but other patterns are also in evidence; Klein, for example, shows a heavy-bladed weapon resembling a dragoon sabre.

The *Handlanger-Corps* wore a uniform like that of the ordinary artillery, but with light blue collar, cuffs and turnbacks; they wore the bicorn, and were equipped with infantry weapons and personal equipment. Personnel of the cavalry batteries wore the ordinary artillery uniform, though an interesting figure is shown in the Elberfeld Manuscript, dated 11 March 1814. It appears to depict a member of a cavalry battery wearing the ordinary brown artillery jacket with red facings and shoulder-strap piping, with grey overalls buttoned on the outer seam in cavalry style (a logical item of uniform under the circumstances), but with a black leather cavalry helmet with the usual brass plate and fittings and black-over-yellow crest, and a black waistbelt and slings and a straight-bladed cavalry sabre with iron scabbard. This perhaps represents an individual or battery which had adopted cavalry helmets for want of regulation headdress (or conceivably a cavalry-man wearing an artillery jacket?).

Artillery equipment was based upon that of the infantry, though muskets were generally restricted to the Artillery Fusilier Bn. and the *Handlanger-Corps*, and were of the ordinary infantry pattern. All gunners carried sabres like those of the infantry grenadiers, with a slightly curved, wide blade in a

Officer (left) and NCO of the *Fuhrwesen* at the end of the Napoleonic Wars. The officer wears a grey coat with yellow facings and has a red shabraque; the NCO has the white uniform with yellow facings of the other ranks, and a shako bearing a plate inscribed with the number of the division and the upper band of rank-lace as worn by *Prima Plana* ranks in the infantry. The cane suspended from a jacket-button was also a symbol of rank, and the heavy cavalry sabre was equally restricted to NCOs during this period. (R. von Ottenfeld)



brown leather scabbard with brass throat and chape (the latter usually mostly covered by the leather), and a brass stirrup hilt with black ribbed grip with a white leather knot. The sabre was carried in a frog from a white leather belt over the right shoulder, and on a similar belt over the left shoulder was carried a pack of artillery tools (pricker, fuses, etc.) in a black leather 'holster' or portfire-case with a flapped top. Certain members of a gun-team might also carry a brown leather gunners' satchel over the right shoulder, and all were equipped, rather singularly, with a 'bricole', a length of rope suspended next to the 'holster' at the rear of the right hip by a white leather strap over the left shoulder; the 'bricole' was used when a gun had to be dragged forward by hand. No other equipment was normally carried, with the exception of the standard pattern of canteen as used by the remainder of the army, upon a strap over the right shoulder, either the earlier oval wooden bottle or the alternative metal canteen. Those men armed with muskets carried the usual infantry cartridge box on a white leather belt, and had the sabre in a combined frog including the bayonet scabbard.

Transport

Organisation

The military transport service had to provide waggons, teams and drivers not only for the commissariat but also for the artillery and engineer services and field-bakeries. It was created in 1772 as the *Militär-Fuhrwesencorps* (which under Joseph II had numbered 1,743 men and 1,908 horses, intended to expand to 17,180 men and 34,000 horses in wartime), of which perhaps the most important were those members attached to artillery. An *Artillerie-Bespannungs-Division* provided the *Fuhrwesen* personnel for three foot or two horse batteries, and comprised an officer, five NCOs, three craftsmen (farrier, blacksmith, saddler) and 69 drivers with 180 horses (122 drivers and 203 horses for the cavalry batteries). The actual number of personnel attached to each battery depended upon the nature of the guns, the heavier pieces requiring more drivers, varying between 28 and 66.

Shortages of transport were always endemic, but despite the shortage of official transport, Austrian armies were permanently encumbered by vast trains of officers' baggage, which slowed the movement of the army and were much criticised. Despite this, the average speed of march was probably about ten miles per day, not much different from that usually averaged by the French; but the difference came in the capacity for temporarily quickening the speed. Whereas the French could force-march with great rapidity, the Austrians were totally unable to emulate them, and thus the French enjoyed a huge strategic advantage. Mack appreciated the encumbrance of baggage and in 1805 ordered that the army march with only enough flour and fodder for three or four days, and only tents for half the army (the remainder to bivouac); but the Austrian attempt at 'living off the land' in French fashion was a total failure, the French having had years of experience but the Austrians none at all.

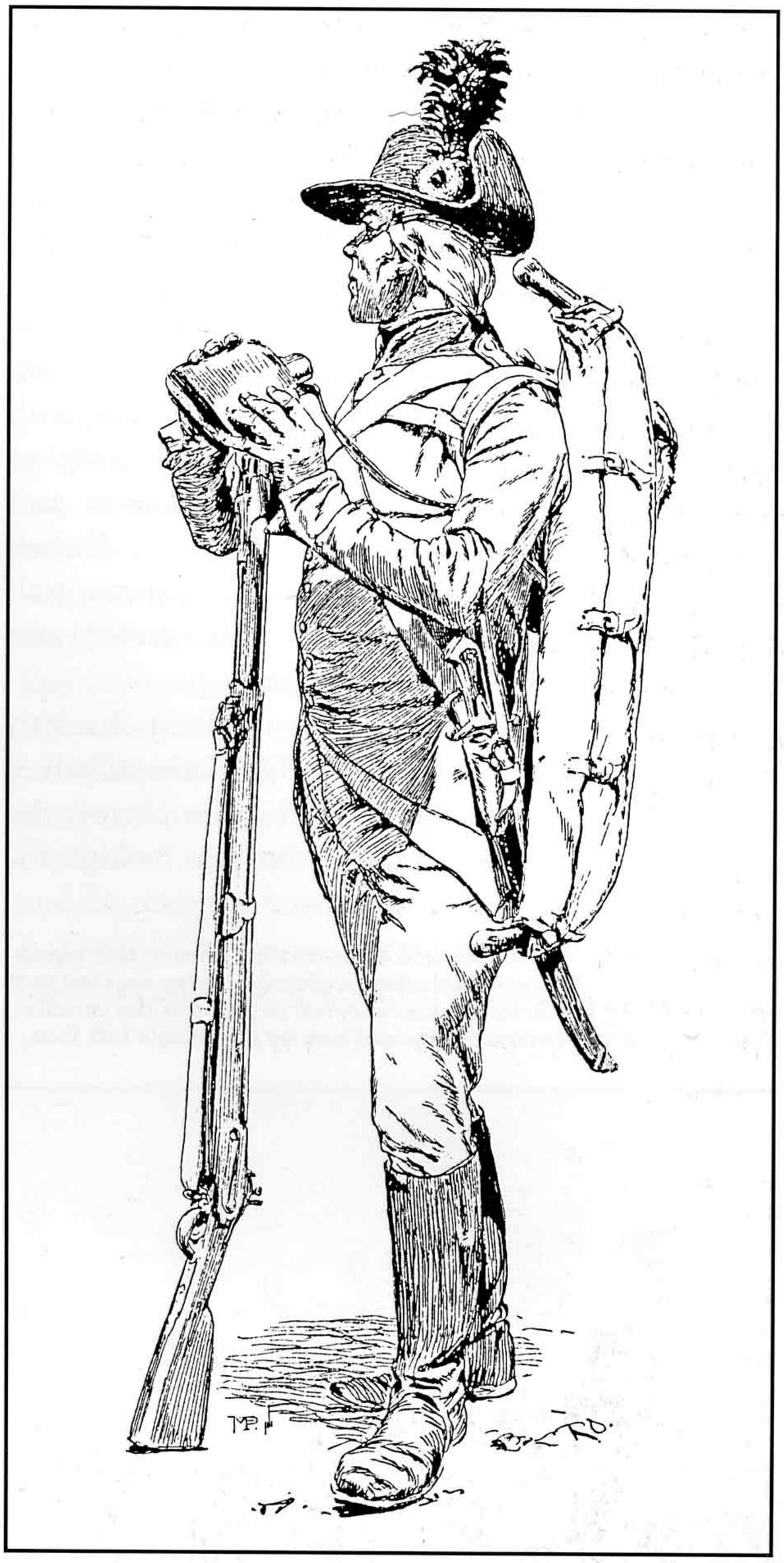
Engineer services, c.1800; they all wear the engineer colouring of blue-grey faced dark red. (Left to right) field officer, Sappers; Sapper; company officer, *Ingenieurs-Corps*; Miner. The Sappers and Miner wear the 'round hat' with upturned rear brim, the officer with the lace band of field ranks; the Engineer's plume is black. (R. von Ottenfeld)

In addition to the military transport service, the main magazines (*Hauptmagazine*) were filled by civilian contractors, whose vehicles and teams moved supplies to the forward depots (*Fassungs-magazine*), from where they were collected by the military trains. The allocation of baggage varied with the size of unit involved, but the official amount permitted in 1809 (exclusive of the droves of private vehicles) was, e.g., for an infantry regiment one 'field chest' (caisson) with four horses; ten four-horse ration-waggons (six for *Grenzer* regiments); a field forge and a headquarters cart (two horses each) and 26 pack horses. A cavalry regiment had the same, but with only three ration-waggons and no pack-horses; a *Jäger* battalion had a field chest, six ration-waggons and 12 pack horses; and a pioneer battalion one field chest, four ration-waggons, a forge and four pack horses.

Uniforms

Though not fully 'militarised' (the rank and file thus remaining unarmed until 1819), the personnel of the *Fuhrwesen* service wore uniform of military style. The ordinary members adopted a distinction used by other European armies whose transport was organised similarly (Hanover, for example), a brassard on the left upper arm, generally in the national colours of yellow with black edges. At the beginning of the period both officers and other ranks wore white open-fronted coats with yellow collar and cuffs, the officers with skirted coats and the rank and file short-tailed jackets, with white waistcoat (straw-yellow for officers) and breeches. The officers wore bicorns and the other ranks the peakless infantry *Gasquet*, and infantry-style waistbelts with rectangular brass fastening, worn over the waistcoat but under the coat. From 1772 *Fuhrwesen* personnel serving the artillery had been permitted to wear the brown artillery jacket, but for reasons of economy most seem to have retained the white uniform.

A new uniform was regulated in 1798 for all *Fuhrwesen* personnel, including the introduction of a new headdress: a black felt 'round hat' with crown 6 ins. high, similar to that worn by the Pontooneers, with the pompon in the usual colours of black and yellow, and a black-over-yellow plume. The jacket was henceforth of infantry cut,



Sapper, c.1800. This man carries the Sapper sword (with no knucklebow) and a two-handed saw in a leather case; the canteen is the metal pattern of 'flask' shape which is depicted most frequently in contemporary pictures towards the end of the period, but which is also shown at least as early as 1798. (R. von Ottenfeld)

but now in 'mouse grey' or 'mixed grey' (the shade apparently varied), with yellow collar and cuffs, waistcoat like that of the infantry but with sleeves, long trousers, knee-boots, mittens, forage-cap and *roquelor* (cloak/overcoat) of the style worn by the rest of the army. Although regulated in 1798 this uniform appears to have taken some time to be introduced, for c.1800 Seele shows an artillery

driver still wearing the *Casquet*, a white or very light grey jacket and breeches, black leather shoulder-belt, and boots which appear to have turn-over tops. Officers from 1798 wore a 'round hat' and grey uniform faced yellow, as described in the text to Plate B. NCOs are recorded in 1799 having inch-wide hat-lace ($\frac{1}{2}$-in. for corporals); they were armed with 'German' cavalry sabres, whereas the rank and file remained unarmed. Craftsmen of the *Fuhrwesen* are noted in 1799 with green coat and red brassard, with grey breeches and sleeved waistcoat, and leather gloves and apron. This style of uniform is shown by Kobell c.1805, the round hat having a large plume, half black over half yellow, a greyish-brown jacket, and a black brassard with yellow edges.

From 1803–05 the regulated uniform changed again, the hat now being a true *Corséhut* with silver lace for the appropriate ranks, but no plume; the jacket was still of infantry cut but white for drummers (no brassard), NCOs and drivers, and grey for craftsmen, still with yellow facings. Officers' uniforms changed less, as demonstrated by their 1811 dress regulations, though they now wore the bicorn: dark grey coat with lining of the same, emperor-yellow (*kaisergelb*) collar and cuffs, silver buttons and other details as for infantry save that field officers officially had no rank-lace; dark grey *Oberrock* as for infantry, white breeches and knee-boots with steel spurs as for 'German' cavalry; waistcoat, gloves, *épée* and sword knot as for infantry, but no sash. (Adjutants were permitted to use gold sword knots from 1810.) The shabraque was like that of 'German' cavalry (i.e. square-cut), but the harness as for hussars.

Miner, c.1800. This Ottenfeld illustration shows the equipment unique to Miners, including a pistol-holster carried on a shoulder belt; the firearm was carried in place of the musket. The cover of the entrenching-tool lies by the man's left foot.

Shakos appear to have been introduced at the same time as they were adopted by the infantry, but their use was certainly not universal. Ottenfeld shows the shako from 1809, and in 1813 an engraving by Bartsch after Kobell clearly depicts it worn by the drivers of a caisson (who have red valises at the rear of the saddle of the ridden horses of the team), but Klein shows the *Corséhut* continuing in use until 1814–15. The shako was of infantry style, with either a national cockade on the front or a brass shield bearing the initial 'T' (Transport) and the division number, a style which continued in use long after the end of the Napoleonic Wars.

Klein's illustrations give an excellent impression of the *Fuhrwesen* uniform of 1813–15, the ordinary uniform consisting of the *Corséhut* bearing a yellow pompon with black centre on the upper front, with or without yellow loop, with a high upturned left brim with or without a black over yellow plume (or yellow with black tip and base); a white jacket with yellow facings, of the later style with six buttons on the breast; white breeches, cavalry boots with spurs and a wide, white leather waist-belt. Others (presumably craftsmen) wear dark grey jackets, including a tailless version, with yellow collar and cuffs; dark grey overalls with brown leather lining and white buttons; with either the *Corséhut* or, in one case, a scarlet skull-cap, doubtless an unofficial forage-cap. Similar tailless jackets are shown for working dress, with a plain *Corséhut*, breeches, boots and leather apron, or cavalry overalls with buttons on the outer seam and peaked cloth forage caps, shown as both dark grey or dark blue; with a grey-brown greatcoat

and white loose overall trousers. Klein shows an officer with a plain bicorn (with tapes tied up over the top) and a caped cloak with yellow collar patch bearing a white button.

The Engineer Services

Organisation

The engineer services of the Austrian army were divided into a number of separate corps, which were not even all controlled by the Director-General of Engineers. Excluding the Pioneers and the two Pontooneer corps there were three main engineer formations, which were kept in permanent existence even in peacetime due to the importance placed upon the maintenance of fortresses and their defence.

The senior corps, in the style common to several European armies, consisted exclusively of officers. The *Ingenieurs Corps* (commanded at the start of the French wars by Count Pellegrini) comprised ten major-generals, six *Obersts*, 11 *Oberst-lieutenants*, ten majors, 26 captains and 106 lieutenants. Officers were trained at the Engineer Academy in Vienna, which like the military academy (*Theresianische Militärakademie*) was open to commoners as well as to the minor nobility who comprised the bulk of the army's commissioned ranks—though 'technical' services like the engineers were not popular with the aristocracy. The Engineer Academy ran a comprehensive eight-year course, but as the engineer services numbered only three units the graduates were often posted to line regiments. By 1801 the strength of the *Ingenieurs Corps* was: a Director-General (*General-Genie-Director*), six *Obersts*, eight *Oberst-lieutenants*, 12 majors, 30 *Hauptleutes* (captains), 30 Captain-lieutenants (*Capitänlieutenants*) and 60 *Ober-lieutenants*; with a 'Garrison Engineer Corps' (*Garnisonsabtheilung*) of one *Oberst-lieutenant*, six majors and 12 *Hauptleutes*.

The *Ingenieurs Corps* controlled two battalions of rank and file: the Sappers (*Sappeur Corps*) based at Theresienstädt in Bohemia, responsible for the construction of fortifications, and the Miners (*Mineur Corps*), based at Josephstadt, responsible for the defence of and attack on fortresses.

In 1801 the Sappers comprised four companies and a depot (which served the Engineer Academy), increasing to six companies by 1806. At this date the battalion staff (*Garnisonsabtheilung*) comprised an *Oberst*, a major, a surgeon, a paymaster, an adjutant, three medical staff, three *Fouriers* and two assistants, a drum major, a provost and three servants. Each company comprised a *Hauptmann* (captain), a Captain-lieutenant, an *Ober-lieutenant*, an *Unter-lieutenant*, three senior Sappers or NCOs (*Sappeurmeister* and *Sapperführer*), ten junior NCOs (*Ober-Sappeurs*), 25 veteran or experienced sappers (*Alt-Sappeurs*) and an undetermined number of semi-trained sappers (*Jung-Sappeurs*). The depot comprised four officers, 14 NCOs, 12 *Alt-Sappeurs* and an undetermined number of *Jung-Sappeurs*.

The Miners were organised similarly; in 1801 Miner companies comprised four officers, two

Engineer services c.1809. (Left to right) Sapper; Pontooneer; Miner. All wear the blue-grey jacket with dark red facings, though the Pontooneers are often depicted in contemporary illustrations as having uniforms of a stronger blue. All now wear the true *Corséhut* with yellow and black pompon and feather, the upturned brim of the Pontooneer's hat bearing a brass anchor. Note the singular equipment of the Miner, pistol-holster and entrenching-tool. (R. von Ottenfeld)

Austrian cavalry had worn ancient iron helmets as late as the campaigns against the Turks in 1788–89, but equally unusual was 'siege armour' worn by engineers. The French army also utilised helmets and cuirasses to protect sappers within the range of enemy musketry. This Ottenfeld illustration shows the pattern used by Austrian sappers, a cross between a 17th-century pikeman's 'pot' and a morion.

Feldwebels, two *Minenmeisters*, two *Minenführers*, and an appropriate number of other ranks which like the Sappers were divided into *Ober-*, *Alt-* and *Jung-Mineurs*. In 1805 they comprised five field companies (637 men) and a depot (85 men).

Although the officers of the *Ingenieurs Corps* and the Sappers and Miners were members of different corps, they took command over each other according to rank and seniority, but Sapper officers could not be transferred permanently to the Engineers without taking an examination or serving as an instructor at the Engineer Academy; though Sapper and Miner officers could be attached to the Engineers in a temporary capacity. Before 1800 it was customary to recruit the rank and file of the Sappers from the infantry, which often resulted in only the most ineffectual infantrymen being given up by their regiments; from 1801 regulations specified that civilian recruits should be young, unmarried, strong, at least 5 feet 4 inches tall and able to read and write German.

Uniforms

The three corps which came under the aegis of the engineer service wore the same colouring, of medium grey-blue or cornflower blue with dark red facings, generally of infantry style. At the beginning of the period officers of the Engineer Corps wore gold-laced bicorns, blue coats with red facings and gold-embroidered buttonholes on the breast, senior ranks with red waistcoat and breeches and junior straw-yellow, the waistcoat similarly with gold-embroidered buttonholes. Miners and Sappers wore medium blue-grey jackets of infantry style, with dark red facings and white breeches, 'round hats' with upturned rear brim and a yellow plume with black tip at the left side.

From 1798 the same colouring applied, the coat-colour described variously as cornflower blue or

pike-grey, with crimson facings. The headdress became a more formalised *Corséhut* with upturned side-brim, black and yellow woollen pompon, and black and yellow feather at the side. Sapper officers had long-tailed coats of infantry officers' pattern and gold-laced hat, and Miner officers the same but with silver lace. Officers of the *Ingenieurs Corps* wore the same uniform, except that they wore bicorns with a black feather plume instead of the *Corséhut*. White breeches and knee-boots were like those of 'German' cavalry, though canvas overalls were worn over the boots for work in the field; inventories also describe pike-grey jackets, waistcoats and breeches.

In 1811 officers' uniform regulations describe the headdress as the hat worn by infantry (i.e. a bicorn) with an upright, 10 in. black feather plume for Engineers and black and yellow for Sappers and Miners; the coat of infantry style in cornflower blue or dark pike-grey with cherry-red velvet collar and cuffs, lining in the coat-colour and plain gilt buttons; all other items (*épée*, sash, gloves, etc.) as for the infantry, but the *Oberrock*—though in infantry style—was coloured as for the coat, with collar, cuffs and buttons the same. The rank and file continued to wear the *Corséhut* and white buttons. The ranks of *Obermineur* and *Obersappeur* wore gloves, carried the usual NCO cane, and had woollen tape borders to the hat. Equipment is described in the text to Plate E. For siege-work iron helmets and cuirasses of 17th-century style could be used.

Pioneers

Organisation

A supporting engineer corps was the Pioneers, which was mobilised only in wartime to assist the Sappers and Miners in the more unskilled tasks; the first Pioneer (*Pionier*) battalion was raised in November 1792. Until 1809 they were under the direction of the staff, not the Director-General of Engineers; composition was largely non-German, 50 per cent being Bohemian and 35 per cent Moravian.

The corps originated in 1758 as a four-company battalion, recruited from those possessing the necessary skills, such as woodsmen, foresters, miners and boatmen; duties included road-construction and those engineer duties previously the responsibility of the artillery. About 1801 the unit comprised a staff and five companies, and by an order of 17 August 1805, following a proposal by Archduke Charles, the corps was enlarged to three battalions, two four-company battalions for the army in Italy and a six-company battalion for Germany. The German battalion was raised at Linz, the Italian ones at Görz; recruits were taken from the infantry (each regiment provided ten privates and two corporals), plus the re-enlistment of those who had served as pioneers in previous campaigns, with quartermasters and servants taken from the *Stabs-Infanterie*. The two 'Italian' battalions were equipped with 1,010 axes of vari-

Pioneer (left) and Pontooneer, c.1800. The Pioneer wears a light grey jacket with green facings and white buttons, 'German' infantry legwear (white breeches and black gaiters) and a plain 'round hat'; the Pontooneer has a blue jacket and breeches with red facings and a leather-bound hat with black-over-yellow plume. Both carry white leather equipment basically in infantry style. (R. von Ottenfeld)

ous types, 840 picks, 840 shovels, 120 leather aprons (for the carpenters), 64 saws and 200 billhooks; each company had a two-horse waggon and each 'division' (two-company unit) an additional four-horse waggon; each company also had a pontoon bridge. The 'German' battalion had 720 axes, 630 picks, 630 shovels, 48 saws and 150 billhooks.

The corps was disbanded at the conclusion of the 1805 campaign, but reformed virtually as a cadre in February 1806 and by that autumn consisted of two companies each of three officers, 12 NCOs, 15 carpenters, 160 pioneers and two drummers. Two more companies were raised in January 1808 and two further in September, forming a battalion. Sixty men of each company were armed with muskets, the remaining 100 with axes, spades and picks. Three additional companies were formed in December 1808, the two-company 'division' in Komorn becoming independent and the remaining seven companies becoming the basis for seven proposed 'divisions'. Each of these comprised a *Hauptmann*, a Captain-lieutenant, two *Ober-lieutenants*, two *Unter-lieutenants*, four *Feldwebels*, a surgeon and an assistant, a *Fourier* and two assistants, 20 corporals, 30 carpenters, 320 privates, four drummers and four servants. The 1st–4th divisions were based at Prague, 5th–7th at Olmütz and 8th and 9th at Graz. In August 1809 a 10th division was authorised.

Pioneer, 1809. The uniform colouring of the previous uniform is retained (light grey faced green, white buttons, 'German' infantry breeches and gaiters), but the headdress is now a true *Corséhut* with black-over-yellow plume, yellow pompon with black centre, and black leather band. (R. von Ottenfeld)

After the 1809 campaign the peace negotiations reduced the pioneers to a battalion of six companies, formed in Graz from the divisions stationed in Hungary and sent to Vienna in January 1810. In July 1810 the strength was slightly reduced so that the corps now comprised five *Hauptleutes*, one captain-lieutenant, six *Ober-lieutenants*, six *Unter-lieutenants*, 12 *Feldwebels*, 30 cadets, 72 corporals, six quartermaster personnel, 120 carpenters, 810 privates, 12 drummers and 12 servants; and a more comprehensive training programme was instituted covering the majority of engineer duties. In August 1812 two further companies were raised, and the whole reorganised into two four-company battalions, each comprising 12 officers, 56 NCOs, four quartermasters, 80 carpenters, 620 privates, eight drummers and eight servants. In May 1813 the 1st Bn. was increased to six companies, and the 2nd to six in June; in August a 3rd Bn. of four companies was authorised, and in June 1815 a depot company was formed. In 1816 the corps was reorganised and returned to its smaller peacetime establishment.

Uniforms

As the Pioneers came under the direction of the *Generalquartier-meister* and not the engineering services (until 1809) they did not wear the blue-grey with red facings of the engineers, but their own colour scheme of grey with light green facings. Initially they wore the infantry *Casquet* with a brass frontal plate and the usual yellow and black

woollen pompon, but in 1798 a revised uniform was authorised, though as before it was basically in infantry style. The new headdress was a plain 'round hat' with upturned rear brim with the woollen pompon as before. The short infantry jacket remained pike-grey with green facings; further details are given in the text to Plate B. The 1805 uniform had a more formalised *Corséhut* as worn by the engineer services, and light grey uniform faced green; details are given in the text to Plate E. The 1811 officers' uniform regulations describe the hat and jacket as like those of the *Jägers*, but minus the horn badges; with plain white buttons, waistcoat, breeches and other items as for infantry. The *Oberrock* is described as very dark grey (*schwarzgrau*: 'black/grey') with green facings and white buttons.

Pontooneers

The pontoon service traditionally had more significance in the Austrian army than in those of other European states, as during the wars against the Turks in Hungary river-navigation was equally or more important than road-transport, given that the roads were often wretched and that the main fortresses were situated on rivers. From the mid-16th century the shipment of troops and supplies by river was the responsibility of a special department, the *Schiffmeisteramt*, which under Maria Theresa was separated into administrative and pontoon corps under the heading of *Kriegsbrückenwesen*, reorganised in June 1767 into a pontoon battalion with staff and a garrison company, the whole commanded by an *Oberstwachtmeister*. The garrison was at Klosterneuburg; the battalion comprised four companies each of three officers, an *Oberfeldbrückenmeister* (sergeant-major bridge-master), two *Unterfeldbrückenmeisters*, five corporals, 15 veteran pontooneers, 40 privates and a drummer. The unit was equipped with prefabricated bridges conveyed on six-horse vehicles, crewed by *Fuhrwesen* personnel. In peacetime the corps was responsible to the civilian *Oberstschiffamt* in Vienna.

On 3 May 1805 the corps was augmented to six companies, each 121 strong: three officers, two *Ober-Brückenmeisters*, two *Unter-Brückenmeisters*,

Pioneer, c.1813. This Ottenfeld illustration shows the later pattern of jacket with the slimmer turnbacks of post-c.1808, but still with the 'old'-pattern single-button pocket flap. The entrenching-tool is carried with the blade in a case, on a white leather belt over the shoulder. The firearm is a short carbine as issued to some pioneers at this date to remedy shortages of the infantry musket.

eight corporals, one *Fourier*, ten carpenters, 22 veteran pontooneers, 72 privates and a drummer; for the 1805 campaign 100 pontoons were with the army in Germany and 100 in Italy, and for the 1809 campaign each company was augmented by 25 privates. (A train of 120 pontoons required 120 6-horse pontoon carriages, six equipment waggons, five forges, five coal-waggons for the forges, five carts and 804 draught horses). Ultimately, three companies with 170 (later 195) pontoons served with the main army in the 1809 campaign, one company in Poland, one company in Italy and one company in reserve. After the 1809 campaign the corps was augmented by officers from the disbanded Austrian navy; in 1812 one pontoon company accompanied Schwarzenberg's Auxiliary Corps, the majority of their equipment being lost in the campaign. In the 1813–14 campaigns the *Pontonier-Corps* was supported by a draft of 150 men selected from the *Landwehr*, and by two companies of *Czaikisten*.

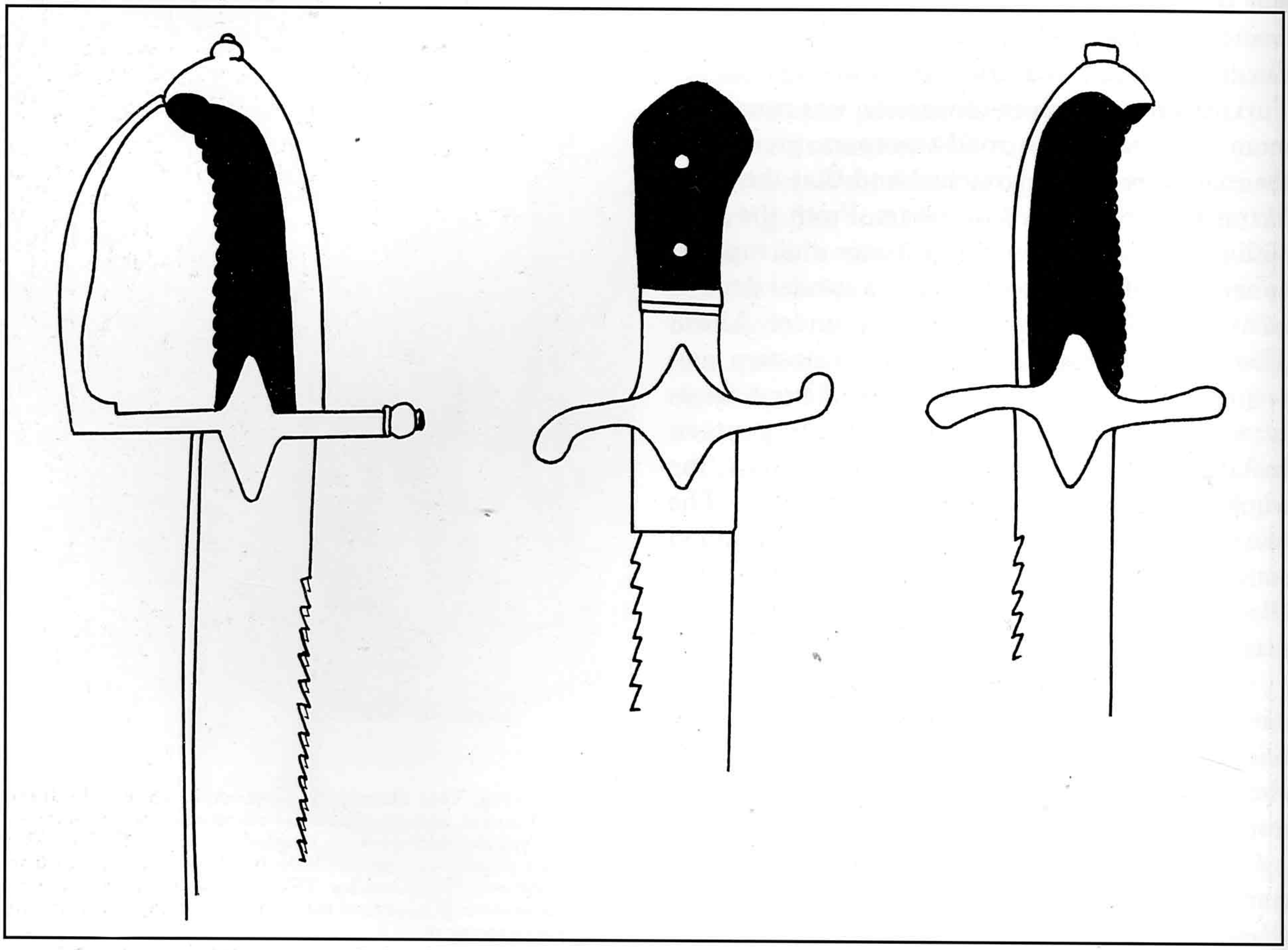
The *Czaikisten* were a pontoon corps associated with the *Grenzer* organisation, originally farmers and frontiersmen colonising the land between the Rivers Danube and Theiss, performing guard-duty, supply, police and customs functions on the Danube. They used long, lightly armed, shallow-draught rowing boats with sails, their title (also *Tschaikisten*) coming from the term for such craft, *Tschaiken* (from Turkish *kaike* = rowing boat). As with the ordinary pontooneers, the *Czaikisten* were employed in detached companies, often attached to the pontoon companies.

Uniforms

The pontooneers wore a uniform in basically the

The Engineer sabre carried from the mid-18th century, used at least until 1802. Ribbed leather grip, brass hilt; slightly curved 26-in. blade with serrated saw back. The same pattern was carried by *Prima Plana* NCOs without serration on the blade, and with gilded hilt and scabbard mounts.

The 1769-pattern Sapper sabre: brass hilt with wood or bone upper section, slightly curved 22-in. blade with serrated back.
The Sapper sabre of 1807: brass hilt with ribbed leather grip, 24-in. slightly curved blade with serrated back.



1: NCO, Artillery, c.1799-1800
2: Officer, Artillery, c.1800
3: Gunner, Artillery, c.1799-1800
4: Gunner, Artillery, c.1800

1: Field Officer, Fuhrwesen, 1798
2: Driver, Fuhrwesen, 1798
3: Pioneer, 1800

1: Pontooneer, 1798
2: Field Officer, Engineers, 1800
3: Field Officer, Sappers, 1800
4: Sapper, 1800

1: Gunner, Artillery, c.1809
2: Private, Handlanger-Corps, 1809
3: Driver, Fuhrwesen, c.1813
4: Gunner, Artillery, 1809

1: Sapper, 1809
2: Miner, 1809
3: Pioneer, 1809

1: General Officer
2: Officer, Quartermaster general Staff, campaign dress
3: Surgeon

1: Officer, Artillery, c.1813
2: NCO, Artillery, 1814
3: Gunner, Artillery, service dress, 1814
4: Gunner, Artillery, 1814

1: NCO, Pioneers, 1813-14
2: Pioneer, 1813-14
3: Pontooneer, 1813-14
4: Infantry 'craftsman', 1814

engineer colouring, but with their own distinctive features. The principal uniform colour was described as 'cornflower blue', and appears in early pictures of this period as a lightish shade; for officers it was the usual long-tailed coat with red facings and waistcoat and white breeches, with a bicorn hat. The other ranks wore the same colouring, but though an infantry-style coat is depicted by some contemporary sources, the distinctive pontooneer uniform consisted of a tailless jacket and 'round hat', as described in the text for Plate C.

The distinctive uniform of the Pontooneers c.1798–1800 is depicted excellently in this Mansfeld print, the unusual tailless jacket with red turndown collar, turned-back upper lapels and pointed cuffs, boots similar to the hussar style and the 'round hat' which at this date appears not to bear the anchor device. A coloured version of this print shows the hatband as yellow, which may be the NCO rank-distinction, though the hand-colouring of engravings sometimes resulted in errors by the colourist.

By 1803, if not before, the hat had taken the appearance of a more orthodox *Corséhut* and was ornamented with a brass anchor. Orders for 1805 describe the other ranks' hat as plain, and those of NCOs as decorated with silver lace, more ornately for the higher ranks as the hats of senior NCOs cost almost twice those of corporals, who also had silver lace trimming. For 1809 the anchor badge is described as 3 ins. long, *Unterbrückenmeisters* (*Feldwebels*) having an inch-wide silver lace edging and corporals $\frac{1}{2}$ in. edging. Officers' uniform regulations from 1811 note the bicorn hat as worn

A driver of the Pontoon Train, 1770–98; a uniform not dissimilar from that of the ordinary *Fuhrwesen* personnel, but with the infantry-style *Casquet* bearing the anchor-badge of the Pontooneers. (R. von Ottenfeld)

before; cornflower blue coat and *Oberrock* with bright red collar and cuffs, red lining for the coat and cornflower blue for the *Oberrock*, white buttons, silver rank-lace on the cuffs of field officers; red waistcoat, white breeches, grenadier sabres, and other items as for the infantry. The colour of the uniform is rendered variously in a number of sources; 'light blue' is mentioned in 1805 (waistcoat and jacket, plus canvas overalls), but other sources show the shade as very much darker, from greyish medium-blue to a brilliant darker shade. Whilst contemporary illustrations cannot be expected to match the original colour exactly (especially when the hand-colouring of engravings is considered), the colour generally appears to have been more of a bright blue.

Klein's illustrations of the 1813–15 period show the *Corséhut* with a very tall, upturned left brim, a yellow woollen pompon with black centre on the front, with tall feather plumes at the front either black with yellow base, or half-black over half-yellow. The jacket is medium blue, apparently with six buttons on the breast, with red collar, cuffs (with two white buttons on the rear seam), turnbacks and piping on the white (?) shoulder-strap at the rear of the right shoulder; medium blue breeches, black knee-boots either cut square at the top or with cutaway rear as worn by some artillery; white leather infantry equipment and an iron-hilted, slightly curved grenadier-style sabre in a brown leather scabbard with iron chape, with white leather knot.

At the beginning of the period the *Czaikisten* are depicted in a uniform similar to that of the Pontooneers but with pointed red cuffs, and instead of the 'round hat' an infantry *Casquet*, perhaps with an anchor badge on the front. By 1809 the uniform had taken on a more overtly Hungarian aspect: a blue infantry jacket with red collar-patch, turnbacks and cuffs with the white fringed lace loop known as *Barentatzen* or 'bear's paw'; sky-blue Hungarian breeches with mixed black-and-yellow braid on the outer seam and as knots on the front of the thighs, and Hungarian ankle-boots; with an infantry-style shako devoid of decoration save for the usual yellow woollen pompon with black centre on the upper front, and a brass anchor badge below. Infantry equipment (including grenadier sabre) was in black leather.

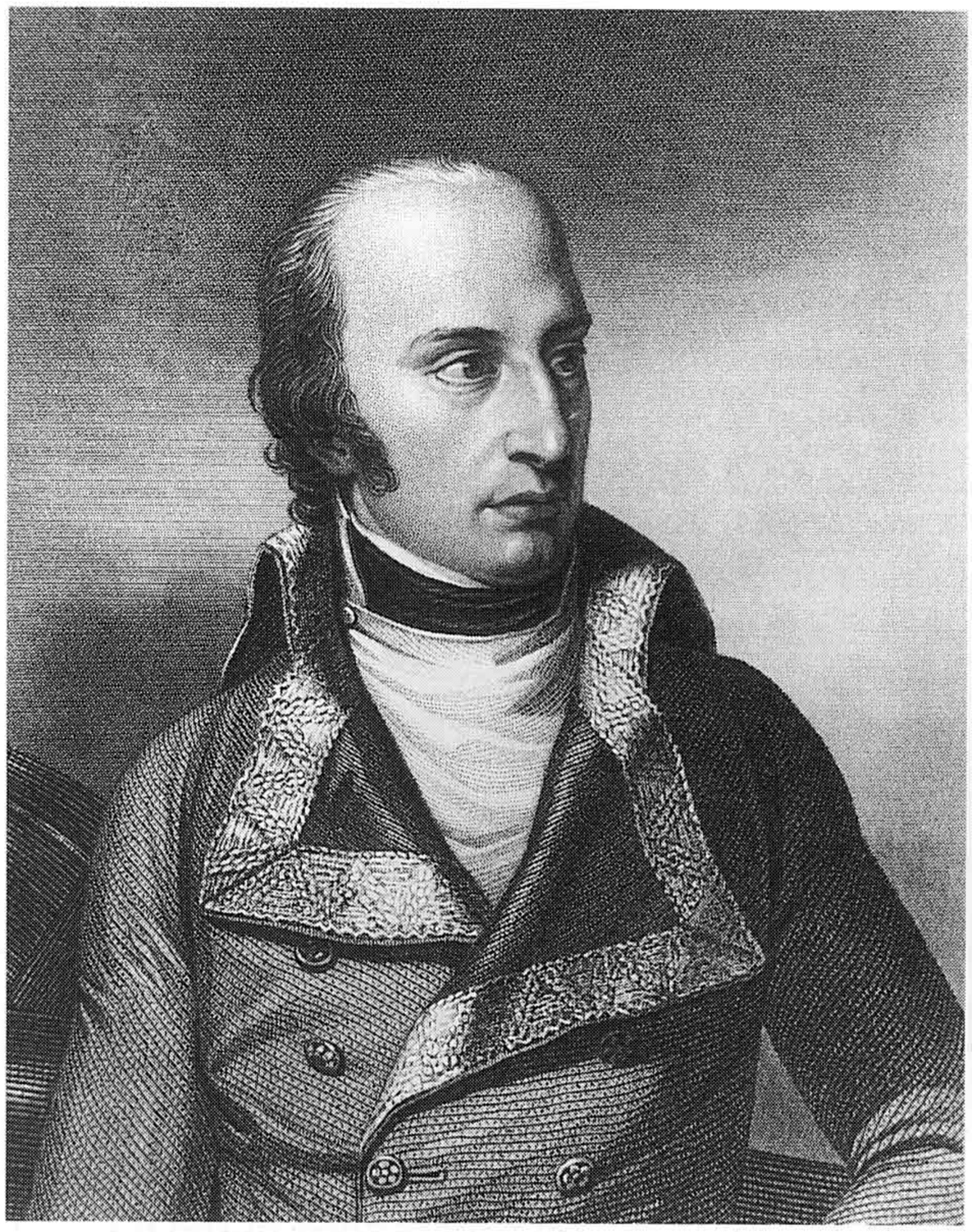
Medical Services

Organisation

In an age of rudimentary medical treatment the Austrian army's medical service was especially inadequate, despite the existence (rare at the time) of a military medical academy, the Josephinium (named after the Emperor Joseph II who founded it in Vienna in 1785), the head of which, Anton Edler von Bienenburg, was also the chief medical officer of the army. There were no organised medical services whatever until after the end of the Seven Years' War, when Lacy devised mobile or 'flying' ambulances for the lightly wounded, and later created field hospitals.

In peacetime military hospitals were maintained in large garrisons, and in wartime field hospitals accompanied the army, but their staffing was tenuous in the extreme: instead of trained orderlies, hospital attendants were either invalids themselves or soldiers' wives. More haphazard still were the local hospitals established in the town or village nearest to a battlefield, which were the responsibility of untrained local civilians, so that with such a dearth of skilled assistance the plight of the Austrian wounded was especially wretched

Nevertheless, there was what appeared to be a comprehensive medical service distributed throughout the army: senior surgeons were attached to each regiment with assistant surgeons distributed at battalion level, and medical orderlies were attached to each company. Only the higher ranks of the army medical service were graduates of the Josephinium or the school established at the military hospital at Gumpendorf. There were some 120 staff surgeons and about the same number of regimental surgeons, who were trained doctors; the battalion surgeons (*Ober-Chirugen*) had some medical training, but the company medical assistants (*Unter-Chirugen*)—also sometimes styled *Feldschers*, who doubled as barbers!—mostly had to acquire their skills in the ranks. Even the senior surgeons were not classed as fully commissioned officers, but as military officials, and thus were junior to all ranks holding a full commission, ranking only on the same level as the *Fuhrwesen* officers. Unpromising though this organisation was, it was rendered worse by a



The Archduke Charles (1771–1847), son of the Emperor Leopold II and younger brother of Francis II (Francis I of Austria). Charles was Austria's most distinguished general of the period (despite his eclipse after the defeat of 1809) though perhaps even more influential as a reformer and organiser. (Engraving by T. W. Harland after Kellerhoven)

constant shortage of personnel. There was also a Military Pharmacy Department with some 20 apothecaries, which ran the field pharmacies (*Feld-Apotheke*), from 1794 supervised by civilian apothecaries, from which the regimental surgeons distributed medicines.

Archduke Charles endeavoured to make improvements: in 1807 regiments received a medical cart (*Bandagenwagen*) which accompanied the unit into action and served as a field dressing station; and in 1808–09 four garrison hospitals were founded. Before battle casualty clearing stations were opened behind the army, normally manned by two staff surgeons and their assistants; invalids and the lightly wounded were formed into medical units to supervise casualty evacuation in requisitioned carts, with the *Stabs-Dragoner* and *Stabs-Infanterie* units keeping order at the dressing stations. Even the normal medical procedure of treating the most urgent cases first was officially forbidden, officers (even if only slightly hurt) being ordered to receive treatment immediately before the rank and file were attended. Without the aid of civilians, even though untrained, and the assistance of the religious nursing organisations, the entire medical system might well have collapsed.

Uniforms

Medical staff who came under the aegis of the chief medical officer (i.e. not the regimental personnel pressed into temporary service) wore a distinctive uniform of their branch, not (as in many armies) a variation of the uniform of the unit to which they were attached. Although the style changed progressively throughout the period (as with infantry uniforms), the colouring remained constant. At the beginning of the period medical officers wore a medium-blue infantry officer's style coat with black collar and cuffs, red waistcoat and breeches and a bicorn hat; for senior ranks the hat and waistcoat were gold-laced, and the cuffs bore field officers' rank-lace in gold; the sash was not worn (indicating that, like the *Fuhrwesen* officers, they were not fully commissioned ranks), but instead a white leather waistbelt, over the waistcoat but under the coat. The sword was an infantry-style *épée*, but only in 1799 were medical officers permitted to carry a sword knot. This basic colour scheme remained in force throughout the period (the breeches became the white infantry officers' version); see the text to Plate F.

General Staff

Organisation

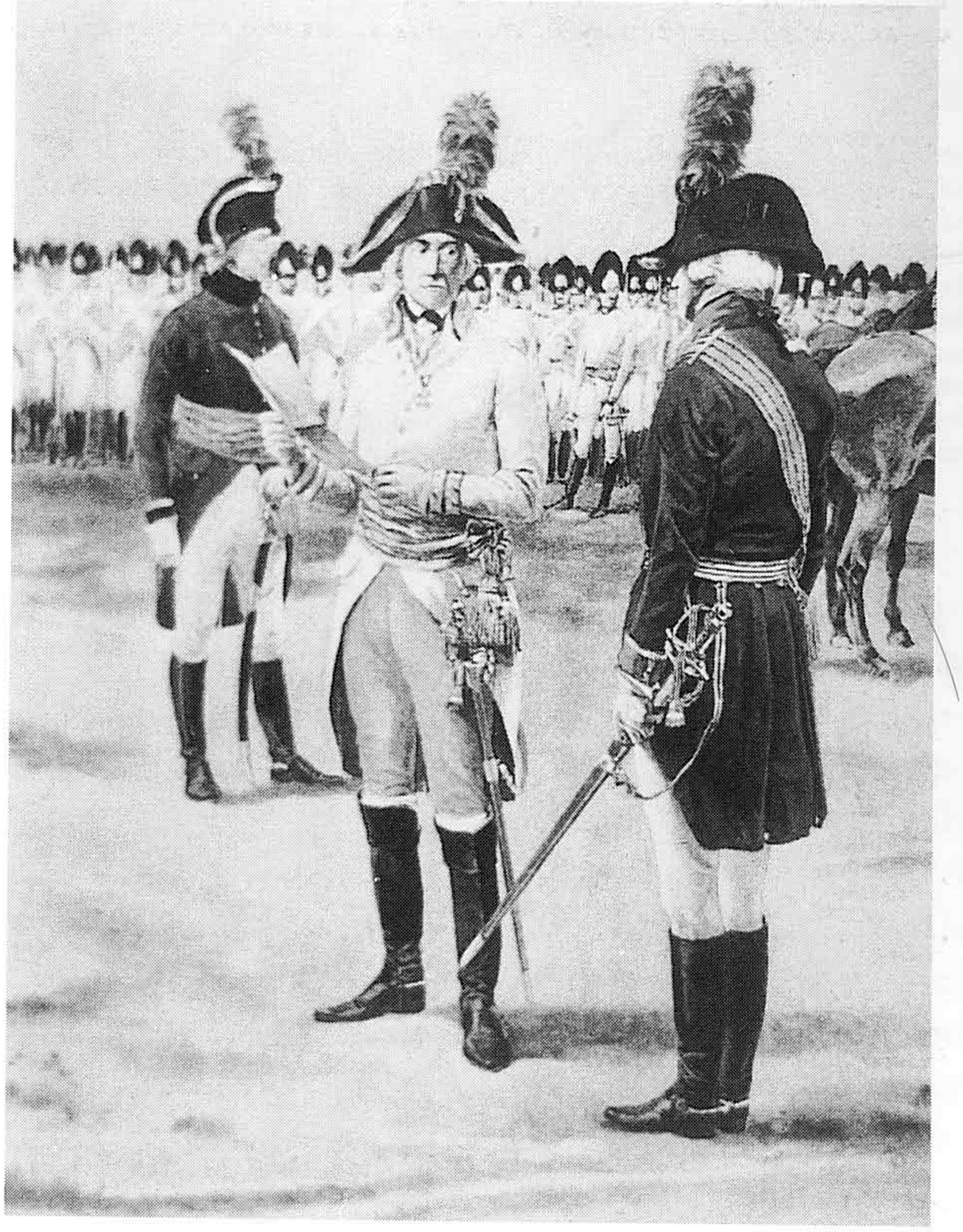
Thanks to the reforms and organisations of Field-Marshal Count Lacy (president of the council of war 1766–74), the Austrian army had a comprehensive staff organisation. Though far from perfect, the staff system was such that when Austrian and Russian forces served together, the Austrian staff ran not only their own forces but virtually those of the Russians as well, whose organisation was particularly poor. In the Austerlitz campaign, for example, the Russians would scarcely have been able to move without Austrian staff officers, guides and commissariat assistance. This dominance of the Austrian staff led to some friction as the

Russians tended to resent having to rely upon their allies in this way, and used them as scapegoats when things went awry. Yet competent though the staff might be, the Austrian army was plagued by a duplication of responsibility (some matters concerning not just military but civil service departments as well) and by the immense amount of paperwork which the Austrian system generated, a problem so vast that it was never fully mastered.

The main military administrative body was the *Hofkriegsrat*, a military-civilian body established in 1566. It directed the 'technical' departments—engineers, supply and ordnance—and controlled directly the 'Military Border' between the Hapsburg and Ottoman Empires, but was not primarily concerned with the conduct of campaigns. The establishment in 1792 of a military department within the civilian *Staatsrat* which controlled internal affairs served only to complicate and duplicate functions. Lacy subdivided the *Hofkriegsrat* into two military departments and one civilian (to control military justice), and similar divisions were introduced into the Empire's 12 military districts (*Generalkommanden*). Associated with the *Hofkriegsrat* but with their own administration and authority were the 'technical' departments, the Directors-General of Artillery and Engineers, ordnance administration, medical and commissariat services, and the allied civilian supply-service (*Hauptverpflegungsamt*) and the river-transport and navigation service (*Schiffamt*).

Archduke Charles made an earnest attempt to reform the military administration in 1801–05, abolishing the *Staatsrat* and establishing a War Ministry superior to the *Hofkriegsrat*; but though the War Minister (Charles) directed policy, the extant organisation of the *Hofkriegsrat* in three departments was retained. Charles did manage to reduce the amount of clerical work involved, but the *Hofkriegsrat* remained the administrative power base; and when Charles fell from grace after the defeat of 1809 the Emperor returned to it almost all of the army's administration.

The army's more immediate staff work was the responsibility of the General Staff (*Generalquartiermeister* or 'Quartermaster-General-Staff'), central policy direction being given by the Emperor and his advisors, all the generals in a particular army comprising the 'Great General Staff'. Each force's 'Small General Staff' was composed of professional staff officers, the Adjutant-General's Department and the personnel of the *Generalquartiermeister*, though the latter generally existed only in wartime and a permanent head was appointed only in 1801. Logistics and commissariat planning were the responsibility of a mixed civilian-military body, the *General-Kriegs-Commissariat*. Even in peacetime a small staff was retained, 21 'staff officers' (a term implying field ranks, above major in this instance), 16 captains and 12 subalterns. This system was found to be incapable of running the 'Corps' organisation introduced before the 1809 campaign, so each Corps commander was allotted a small permanent staff of officers to supervise the 'technical' services; but as there were no divisional staff officers, the small Corps staff was swamped with work and considerable delays resulted, reaction to enemy manoeuvres frequently



Staff officers, c.1800. The general officer (centre) wears the white staff uniform with red facings and breeches, with the earlier stand-and-fall collar; at the left is a member of the *Generalquartiermeister* wearing a green coat with black facings and gold lace of field rank on the cuff. At the right is a general-adjutant in green, faced red, wearing the sash over the shoulder in the manner of regimental adjutants. All wear the green plume of the staff. (R. von Ottenfeld)

being slow. Improvements were made by Count Joseph Radetzky (appointed chief of the 'Quartermaster-General-Staff' after the 1809 defeat) who in 1810 reorganised the staff into separate departments; but even he allowed the commissariat and transport to remain outside the general staff organisation, when these aspects were among those in most urgent need of reformation.

General officer, c.1809. This Ottenfeld illustration shows the later pattern of coat with a white standing collar and red cuffs bordered with the zigzag-pattern staff lace; the breeches are red and the gold-laced hat has the green plume of the staff. At left is a grenadier of a 'German' regiment.

The staff maintained its own military units, activated in wartime, to provide guards for headquarters and escorts: the *Stabs-Infanterie* and *Stabs-Dragoner* units. Being mounted and thus more mobile—and most distinctive in their light blue dragoon uniform with red facings—the latter were probably the most significant, originally established in 1758 and usually newly raised before every campaign by taking reliable men from the cavalry regiments. For example, one 'division' of dragoons was formed in 1812, served in Galicia in that year and in 1813–15 with the field army in Germany and France. A second 'division' was raised in June 1813 for service in Italy; and a third 'division' in January 1814, serving in France in that year and in Alsace in 1815. All were disbanded in 1816.

Uniforms

Until 1751 there was no uniform specifically designated for staff officers, generals and their aides normally wearing versions of their regimental uniform. From that date a white uniform with broad gold lace was introduced, the lace applied in a wavy pattern, and from the 1780s the lace was made with a broad zigzag weave; buttons were gilt, bearing an ornamented rim and a star device. This dress remained in vogue throughout the period, with the usual change in style as for infantry officers' uniform.

The regulations of 1798 introduced for the first time a difference between full and service dress: for general officers, the dress coat remained white with red cuffs, gold lace and gilt buttons, red breeches, the universal waist-sash and a bicorn hat with green feather plume, and black and gold belt. The service dress consisted of a pike-grey *Oberrock* of a shade officially like that of the facings of Infantry Regt. No. 49 (a light grey shade), with red collar and cuffs. General officers' horse furniture was similar to that of 'German' cavalry, the shabraque scarlet with gold lace bands and bearing the crowned imperial cypher in the rear corners: Kobell c.1805 shows a point-ended shabraque in white (conceivably in error?) with wide gold lace border and the cypher in both front and rear corners.

A different uniform was worn by generals of Hungarian cavalry, whose style was that of hus-

sars, the full dress being a fur busby with heron-feather plume, red dolman and breeches, white pelisse with five rows of buttons, gold braid, black and gold barrelled sash, gold-laced belts, red sabretache bearing the imperial cypher in gold; and a shabraque like that of infantry field officers, red with gold and black lace edging and a tigerskin saddle cover edged red. Their undress uniform consisted of a peaked felt shako with three gold lace bands and 10-in. high green feather plume, red dolman, pike-grey pelisse, and breeches either red, white cloth or yellow leather; and a 'Hungarian' (i.e. point-ended) shabraque with gold lace.

General-Adjutants had worn a distinctive uniform from 1765, of infantry style but in dark green with red collar, cuffs and lining, and plain gilt buttons. Their bicorns were like those of infantry officers, but with the green feather plume of the general staff; waistcoat and breeches of straw-yellow cloth, and boots as for 'German' field officers. Their *Oberrock* was dark green with red cuffs and lining and the same buttons; black and gold belt as worn by general officers, with *épée*; 'mixed grey' overalls for wear on campaign, and the horse furniture of infantry field officers. *Flügel-Adjutants* wore the same uniform, but with silver buttons and a sabre instead of the *épée*; as for regimental adjutants of infantry, they wore the sash over the left shoulder. For the uniform of the General Staff, see the text to Plate F.

Associated with the General Staff were the chaplains or field-pastors, who wore a black coat, waistcoat and breeches, with black stockings and shoes or knee-boots, with a black clerical collar and 'falling bands' edged white, and a plain black bicorn.

Members of army departments associated with the staff: at left a military chaplain, and at right a medical officer. The former wears an all-black costume, here with knee-boots (stockings and low shoes might also be worn), the clerical collar having black 'falling bands' edged white. The medical officer has a blue infantry-style coat with black facings (and here with black turnbacks, though blue turnbacks are also depicted),with gold lace loops on the cuff and bicorn; white breeches, knee-boots and an infantry-style *épée* suspended from a waistbelt. As neither held a full commission, neither branch wore the sash. (R. von Ottenfeld)

The Plates

A1: NCO, Artillery, c.1799–1800

This figure is taken from a print by J. B. Seele of c.1800, showing the 'old' uniform in use despite the authorisation of the 1798 helmet. The rank of the subject is not specified, though he appears to wear an officers' pattern coat, but gaiters instead of knee-boots; presumably Seele intended to represent a *Feuerwerker*, who wore such uniform-distinctions. Seele shows an ordinary sabre on one shoulder belt; the purpose of the other belt is not shown in the original, though probably it supported the 'holster' of artillery tools and equipment. The headdress is the earlier 'round hat' with NCO lace, not the later and more formalised *Corséhut*. The black-over-yellow national plume is shown in contemporary pictures in a number of designs: the proportions of colouring either divided equally, or as a black plume with yellow base, or yellow plume with black tip; or even, as here, yellow with black tip and base.

A2: Officer, Artillery, c.1800
This figure wears the ordinary officers' coat of the infantry style, at this period without turnbacks, with the regulation sash and legwear; the rank is that of company officer, lacking the cuff-lace and laced belt of field ranks. The 1798 helmet was like that adopted by the infantry, made of black leather with larger front and smaller rear peaks, the former with gilt metal edging, metal or leather reinforcing bands vertically on the sides, a chain chinstrap, and a gilt comb supporting a crest of black-over-yellow silk for company officers and black-over-gold cord for field ranks. The large gilt front-plate was like that of the infantry, bearing the emperor's 'F.II' cypher, unlike the artillery-pattern plate worn by other ranks.

A3: Gunner, Artillery, c.1799–1800
After J. B. Seele like Plate A1, this gunner wears the ordinary short-tailed, single-breasted jacket of infantry style but in artillery colouring; Seele shows no shoulder straps. The 'round hat' is worn with the upturned brim at the rear, ornamented with the national cockade and lace loop; an unusual feature are the brown breeches in place of the regulation white. The single shoulder belt supports a curved sabre with a hilt lacking a knuckle bow, perhaps an old fusilier sabre or a pioneer's side-arm; the regulation sabre with stirrup hilt was far more common.

A4: Gunner, Artillery, c.1800
This gunner wears the regulation uniform of 1798, the brown short-tailed jacket with red facings and brown shoulder straps piped red, and the 1798 helmet. For the rank and file this was similar to the infantry helmet (having a leather comb and chinstrap unlike the officer's helmet), but had two significant differences: the crest was of red wool, and the brass front plate bore a cannon barrel in place of the cypher of the infantry. Equipment consisted of a grenadier-style sabre and the black leather 'holster' of tools, both fitting into frogs on the shoulder belt; and a brown rolled greatcoat slung diagonally across the back by means of a white leather strap.

B1: Field Officer, Fuhrwesen, 1798
Officers of the *Fuhrwesen* (as in this figure after a print by Mansfeld) from 1798 wore a 'round hat' with $1\frac{1}{2}$-in. wide gold or silver binding to the brim (in practice silver appears to have been worn), field ranks having a $1\frac{1}{2}$-in. lace band around the base of the crown. On the left of the hat was a gold and black pompon behind which was a leather tube into which was inserted a black and yellow feather plume. The uniform was of infantry style (except that not being fully 'commissioned officers' they wore no sash), but in 'mixed grey' with yellow facings, white breeches, knee-boots and a fusilier-style *épée* worn on a waistbelt, white leather for company officers and the usual gold and black for field ranks; officers wore no brassard.

B2: Driver, Fuhrwesen, 1798
This figure shows the *Fuhrwesen* uniform introduced officially from 1798 (though the earlier style doubtless persisted for some time), with the 'round hat', 'mixed grey' or 'mouse-grey' jacket and breeches, yellow facings, and the brassard of the transport service on the left upper arm. The hat at this period was far removed from the ultimate *Corséhut*, being simply a functional brimmed headdress of a style basically civilian, with the addition of a military cockade and plume, and without the exaggerated turned-up brim of later years.

B3: Pioneer, 1800
The 1798 uniform of the Pioneers retained the earlier colouring of pike-grey with green facings, the shade usually described as grass-green, with white buttons; with white breeches, black gaiters and shoes as for 'German' infantry. Their equipment was as carried by 'German' fusiliers, but with a shoulder belt and sabre like that of the grenadiers; all carried the grenadier sabre with stirrup hilt. Rank marking was as for infantry, officers' hats having silver lace edging to the brim and a 10-in. black and yellow feather plume, field ranks in addition having a $1\frac{1}{2}$-in. silver lace band around the base of the crown. All-black plumes are also noted for officers.

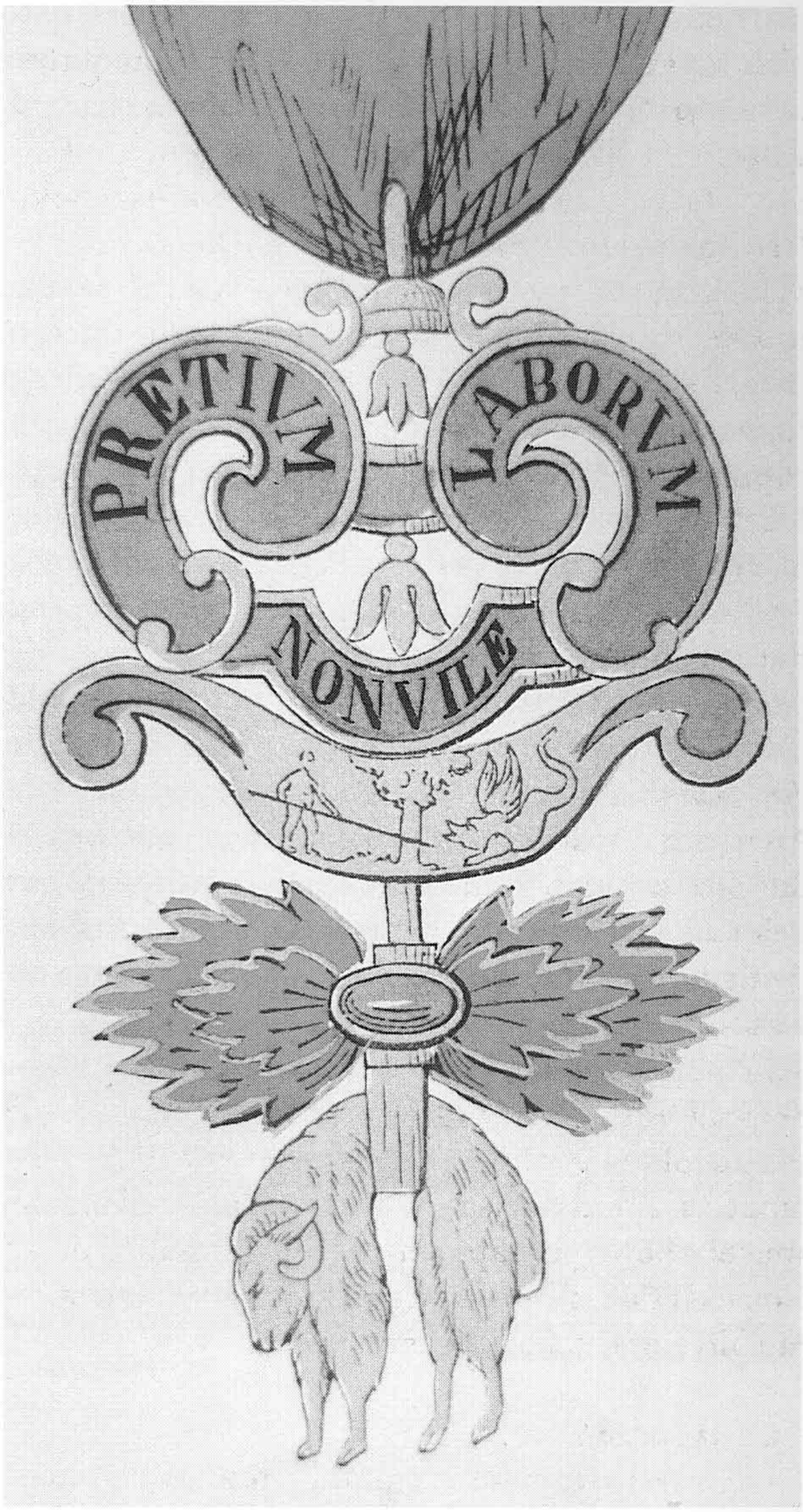
C1: Pontooneer, 1798
From a Mansfeld print, this figure shows the distinctive Pontooneer uniform of a tailless jacket in cornflower blue with red pointed cuffs, turn-down collar and turned-back 'triangle' lapels, a

single row of white metal buttons on the breast, and a similarly coloured waistcoat. Legwear consisted of long blue trousers with high boots of 'Hungarian' cut (i.e. with irregularly shaped tops). The headdress was a 'round hat', shown with either an upturned left brim or rear, sometimes with a yellow band around the base of the crown (NCO distinction?), sometimes a black and yellow pompon, and at the left side a black and yellow plume, variously shown as equally black over yellow, or yellow with a black tip. The equipment was of infantry style, in white leather with black cartridge box, with musket (bayonets are not shown in some illustrations) and a sabre on a shoulder belt at the left hip, one version being shown with a curved blade but a hilt without a knuckle bow.

C2: Field Officer, Engineers, 1800
Taken from a contemporary portrait, this field officer wears a uniform with the colours appearing to be considerably lighter than those normally depicted or described, the body of a pale blue-grey shade and the facings somewhat brighter than the official dark red; the exact shade of such uniforms was probably considerably varied. The hat is the regulation bicorn of the Engineers, but the plume in the portrait has a definite greenish cast instead of the specified black. The waistbelt is the black and gold striped version restricted officially to field ranks, but instead of an *épée* he carries a grenadier sabre.

C3: Field Officer, Sappers, 1800
This figure is illustrated to contrast with the Engineer in Plate C2, wearing a coat of the more usual shade of blue-grey with dark red facings, and like C2 has the gold rank-lace which distinguished field officers around the upper edge of the cuff. Similar rank-lace is worn around the base of the crown of the hat, which was used instead of the bicorn by officers of the Sappers and Miners, the latter having silver lace; the national black and yellow plume replaces the black of the Engineers.

C4: Sapper, 1800
This Sapper wears the uniform used from 1798, variously described as cornflower blue or pike-grey, with the 'round hat' with upturned rear brim



Many contemporary pictures depict Austrian troops wearing decorations of various types. Illustrated here are the principal awards, the senior being the Order of the Golden Fleece, the principal and most valued Austrian order of chivalry, founded by Philip the Good, Duke of Burgundy, in 1429. The insignia was a gold badge of a golden fleece hanging from a blue-enamelled scroll inscribed *Pretium laborum non vile* ('not a bad reward for labour'), with red-enamelled flames issuing from a blue stone above the fleece. The badge was suspended on a red ribbon around the neck or from a buttonhole.

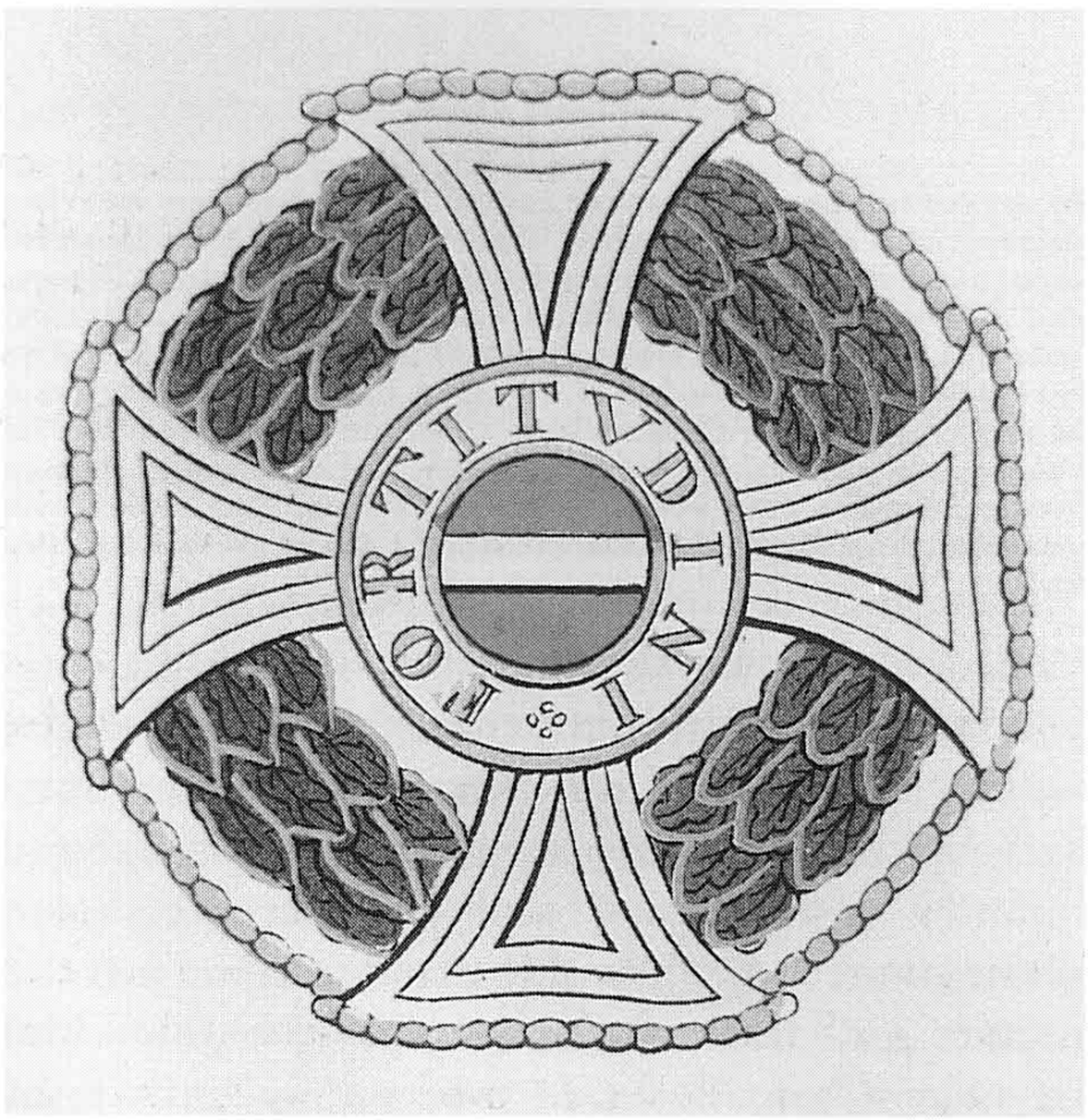
which was later transformed into the true *Corséhut* with upturned side brim. Miners carried no muskets, but Sappers were supposedly armed like the infantry with musket and bayonet; yet some illustrations show their side-arms as being just the musket and their distinctive sabre, without the bayonet. Grenadier-style sabres may have been

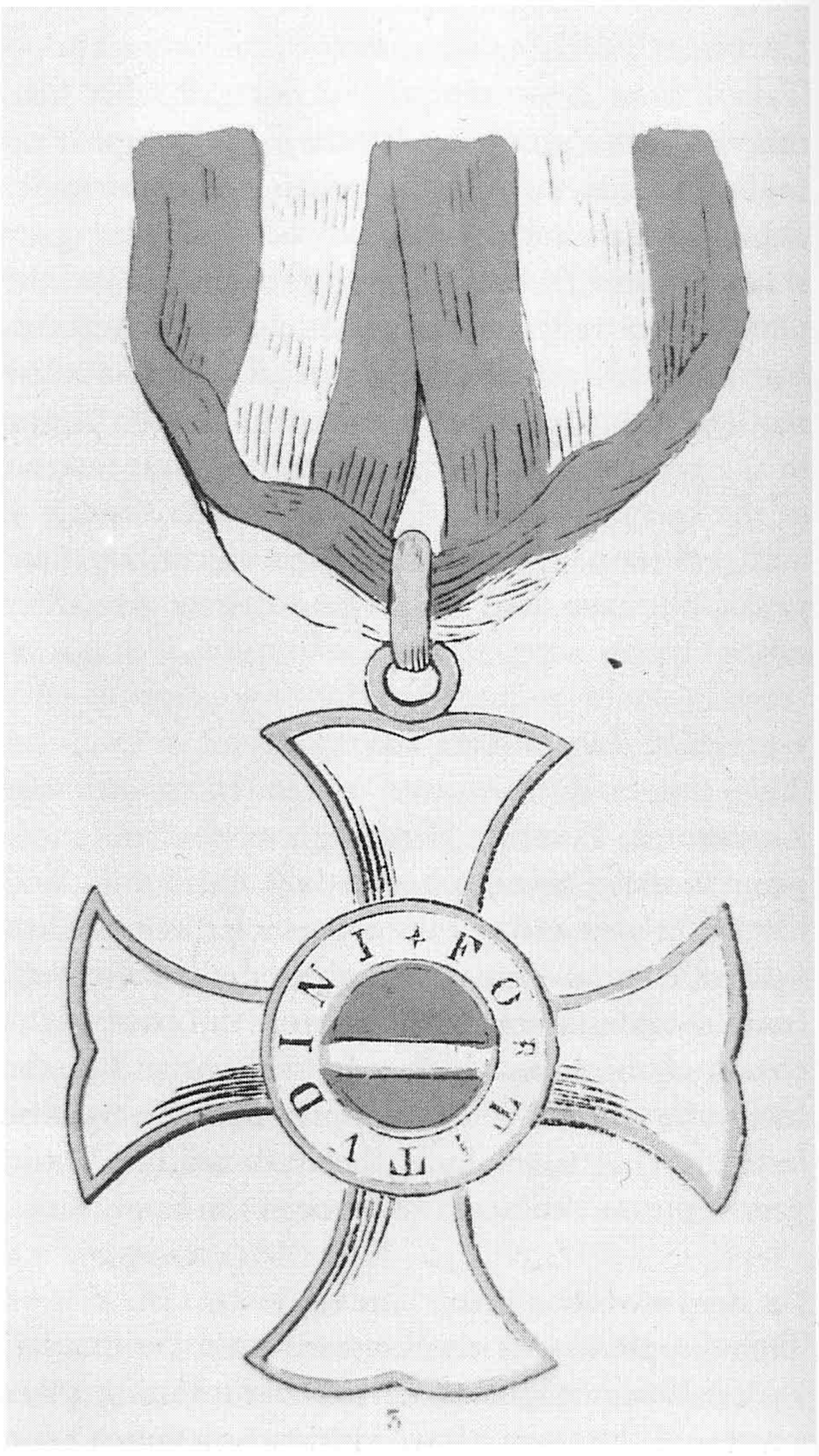
carried by some, though the unique Sapper pattern had no knuckle bow which made easier its use as a saw, two-thirds of its blade having a serrated edge.

D1: Gunner, Artillery, c.1809
This gunner wears the uniform typical of the middle of the Napoleonic era, with the bicorn which was specified in 1806 (though in use earlier); it was black felt with black tape binding, and with woollen 'roses' (bosses or pompons) in the corners, of yellow with black centre. It had a yellow cockade with black edge on the side, secured by a yellow (or white) loop and brass button, and latterly often a black leather chinstrap fastening with a brass button, which when not in use could be tied up over the top of the hat. The hat could be worn with a black waterproof cover, and the style in which it was worn varies greatly in contemporary illustrations. Initially it appears 'athwart' but later in the so-called 'French' style, fore-and-aft, with the cockade often on the left but sometimes on the right; or angled across the head so that it was neither athwart nor fore-and-aft. All these styles are shown concurrently in contemporary pictures, so on campaign at least it would appear that personal preference was the main criterion for the manner of wearing the hat.

D2: Private, Handlanger-Corps, 1809
The *Handlanger-Corps* wore the ordinary artillery uniform, the jackets in 'roe-deer' brown, but with distinctive light blue facings and piping; like the earlier Artillery Fusiliers, they wore infantry equipment and were armed with muskets, sabres and bayonets, and (as appropriate to their duties as artillery labourers) carried in addition the bricole-strap and skein of rope; the rope would be attached to the artillery carriage and the leather

The Order of Maria Theresa was a purely military decoration founded in 1757, existing in three classes from 1765 (Knights Grand Cross, Knights and Commanders). The Knights Grand Cross wore a broad ribbon over the shoulder in dress uniform (poppy-red with white centre) and a silver breast-star with gilt edge and motto *Fortitudine* ('for valour') with a green-enamelled laurel wreath and red and white Austrian arms in the centre. Others wore a white-enamelled cross with gilt edge and red and white centre, upon a red ribbon with white edges, Commanders around the neck and Knights from a button-hole.





strap used as a 'harness' around the body. Legwear was like that of the artillery, though among recorded variations are overalls of the same colour as the jacket.

D3: Driver, Fuhrwesen, c.1813
From about 1803–05 the *Fuhrwesen* wore white jackets, with the previous yellow facings; but though the shako appears to have been introduced about the same time as it was adopted by the infantry its use was not universal, as demonstrated by this figure (taken in part from several Klein illustrations). Klein shows many variations on the standard uniform, most interestingly what appear to be artillery drivers c. 1814 wearing brown artillery jackets with red collar, cuffs and turn-backs, six buttons on the breast, white breeches, black knee-boots or black infantry gaiters, brown greatcoats, and plain *Corséhut* with low crown and high, upturned left brim.

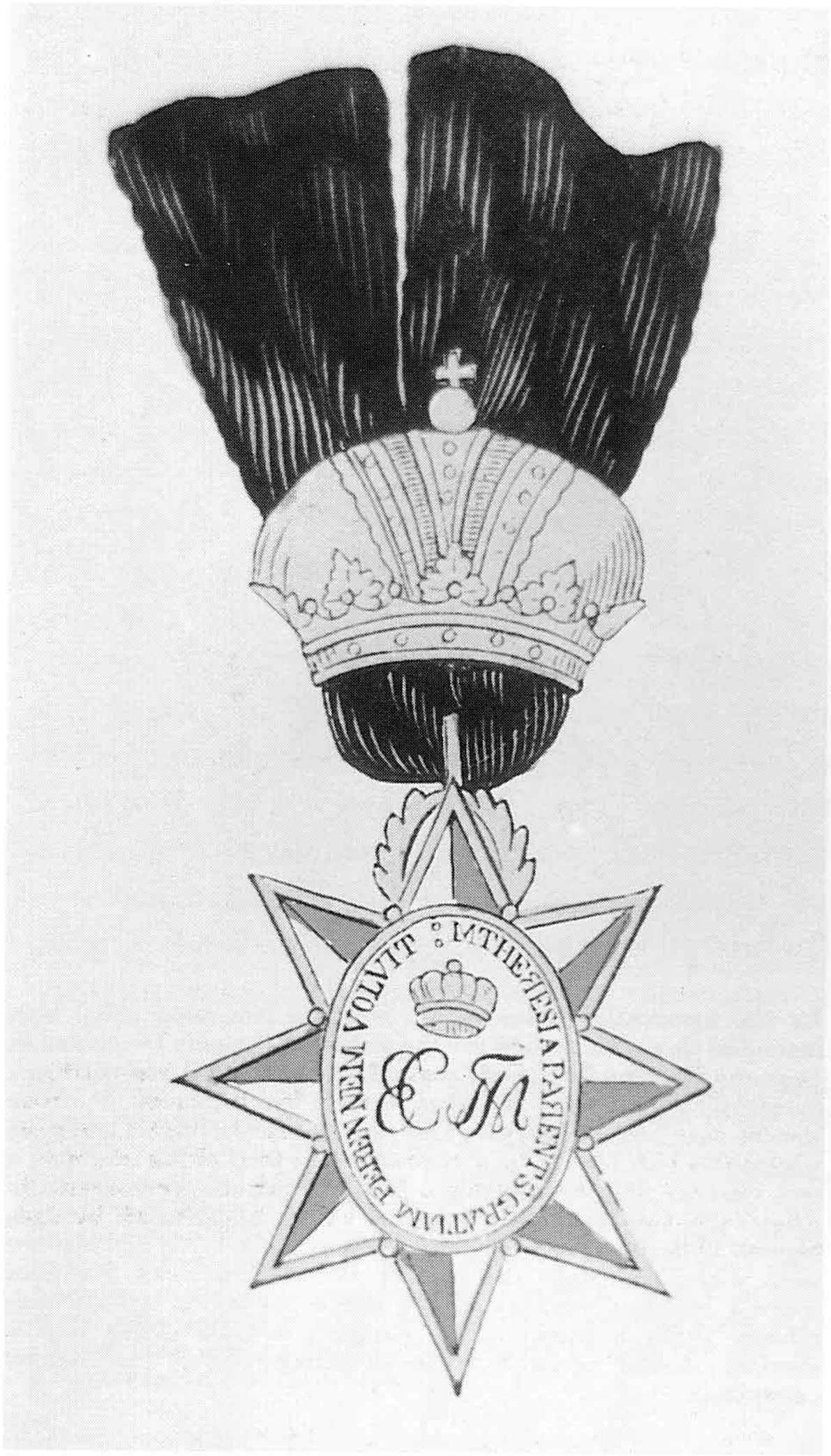
D4: Gunner, Artillery, 1809
This figure shows the rear of the artillery jacket, which followed the pattern used by the infantry at this time, the turnbacks becoming slightly reduced from 1808, and the original diagonal pockets with a single button being altered to the three-button version. Although leather satchels as in Plate D1 were carried by some gunners, the more common equipment was the black leather 'holster' of tools suspended from a frog upon the belt over the right shoulder; the bricole-strap and rope are also carried.

E1: Sapper, 1809
This figure wears the uniform of the engineer services, with the original 'round hat' having developed into the *Corséhut* proper, with a large flap upturned at the left side; the jacket was a light grey-blue shade described variously as cornflower blue or pike-grey, with dark red facings. Sappers had white leather equipment (though black leather belts are noted in inventories), and were armed with the musket and bayonet and carried a black cartridge-box. Some probably carried the grenadier-style sabre with stirrup hilt, but more usual was the sapper sword without a knuckle bow.

As the Apostolic Order of St. Stephen (founded 1764) was intended as a civil award for the nobility, Francis I founded in January 1808 the Order of Leopold, for both civil and military meritorious service. Knights Grand Cross wore a silver breast-star bearing a white and red-enamelled cross with gilt edges and oak leaves, gilt motto *Integritati et Merito* and a red central disc bearing gilt 'FIA' ('Franciscus Imperator Austriae'. Commanders wore a cross of similar design, topped by a gilt imperial crown, on an inch-wide red ribbon with white line near the border around the neck. Knights wore a smaller version of the same medal on a half-inch ribbon from a button-hole. Knights Grand Cross had a similar medal upon a wide shoulder-ribbon for 'dress' occasions.

E2: Miner, 1809
Throughout the period Miners wore the same basic uniform as the Sappers (though some illustrations suggest an all-black plume in the early period, as opposed to the standard black-over-yellow), but their equipment was quite distinctive. Miners were armed with a sabre but carried neither musket nor bayonet; instead, they had a pistol in a brown leather holster at the rear of the right hip, suspended from a belt over the left shoulder; and also carried a heavy entrenching-tool in a leather case at the left side.

E3: Pioneer, 1809
The re-created Pioneer corps from 1806 wore the true *Corséhut* as used by the Sappers and Miners, plain for the rank and file and with silver lace



The Order of Elizabeth Theresa was founded in 1750 for a limited number of officers who had given 30 years' service to the Empire. Its single class (Knights) wore a white-enamelled medal with red and white star-points, edged gold, with gold mottos and devices in the centre, with a gold crown-suspender and a black ribbon worn from a button-hole. The centre bore the cyphers 'EC' (the founder, Empress Elizabeth Christina) and 'MT' (her daughter, Maria Theresa).

trimming for NCOs. The light grey jacket was of infantry cut, with green facings and white buttons, worn with white breeches and gaiters as for the infantry and canvas overalls for work. The equipment was of infantry pattern, in white leather, including a stirrup-hilted grenadier sabre on a shoulder belt with combined sabre- and bayonet-frog, and the infantry musket—though the increase of the pioneer service in 1813 resulted in shortages of matériel, so that the 2nd Bn. received cavalry carbines with short bayonets as the only firearms immediately available. Musicians had the usual 'swallows'-nest' wings common to all arms.

F1: General officer
This figure is based in part upon a well-known portrait of the Archduke Charles, with the addition of a gold-laced hat (a plain hat is depicted in the portrait); the white coat was of the usual cut, with red cuffs and lining and the distinctive gold lace which had an interwoven zigzag pattern. The decorations worn by the Archduke were the breast-star of the Order of Maria Theresa, and the badge of the Order of the Golden Fleece suspended from a ribbon from a buttonhole on the breast. There remained personal differences within the staff uniform: for example, when the Emperor met Napoleon after Austerlitz it was remarked how different he appeared from his companion, Prince Liechtenstein. Francis wore a voluminous great-coat, buttoned up, and a three-cornered hat on the back of his head, which with his stick gave him the appearance of an invalid (though he was but 36 years of age); conversely, Liechtenstein's manner was as bright as the Emperor's was morose, and he appeared in the white staff uniform with gold and black sash and wore his bicorn fore-and-aft.

F2: Officer, Quartermaster General Staff, campaign dress
The officers of the General Staff wore the same hat as General-Adjutants; a green coat with black velvet collar and cuffs, red lining, and plain gilt buttons; straw-yellow waistcoat, white breeches, and 'mixed grey' overalls for mounted duty on campaign; white leather belts or black and gold for field ranks; the ordinary sash and steel-mounted sabre, and used a staff officer's shabraque. Illustrated here is a common service dress, of the green *Oberrock* with black facings and red lining, and in this case the rank-lace of a field officer, worn with the breeches and knee-boots instead of the overalls, a common variation. Unlike the General-Adjutants the sash was worn in the usual manner, around the waist.

F3: Surgeon
Based on a painting by Klein of 1815, this medical officer wears a variation on the uniform prescribed by the 1811 officers' dress regulations, of a medium-blue single-breasted coat of infantry style

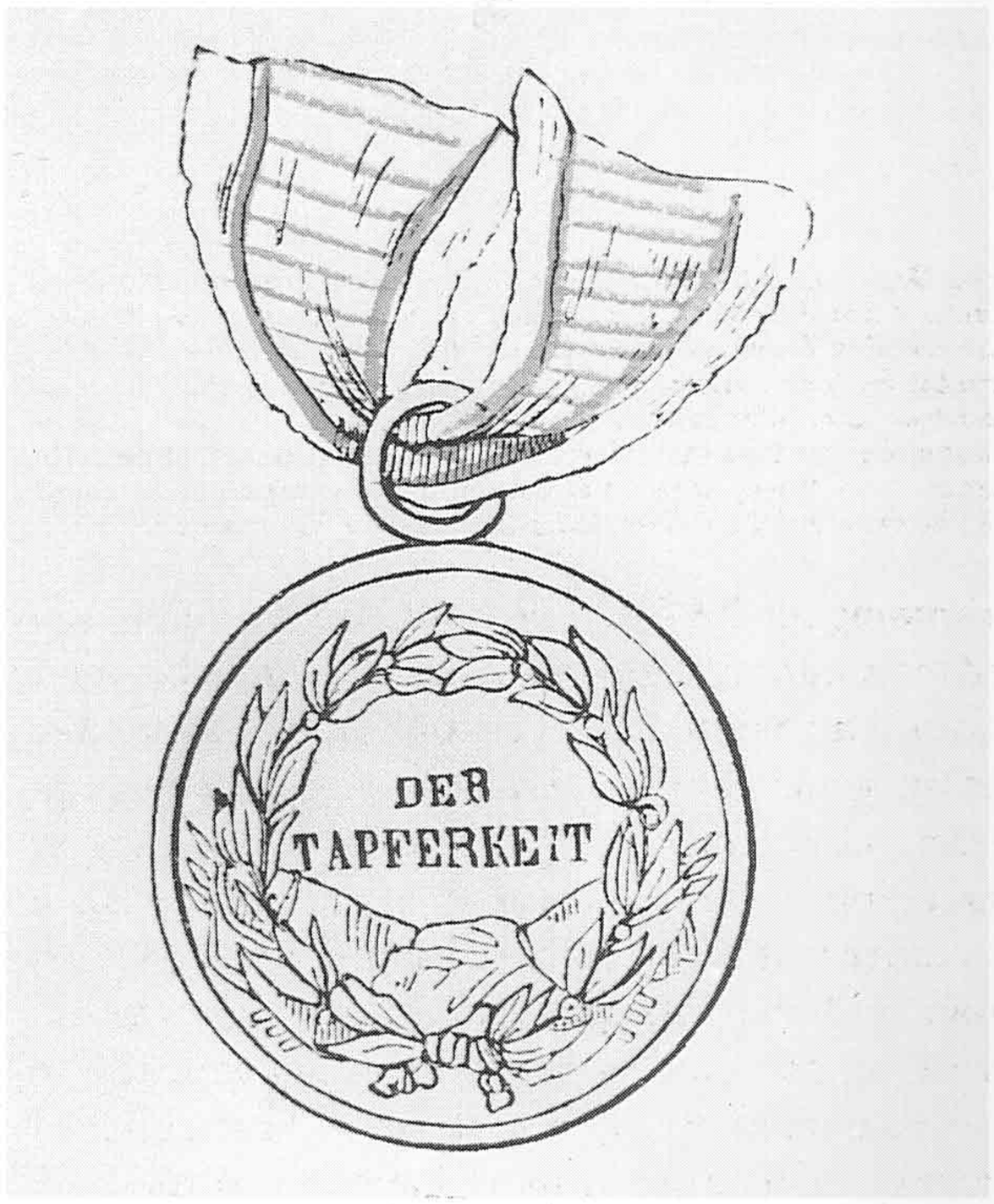
with black collar and cuffs, gilt buttons, horizontal pockets and blue turnbacks secured by a button. Instead of the regulation grey or white breeches and infantry officers' knee-boots, Klein shows black or very dark grey cavalry overalls with gilt buttons on the seam, worn over the boots; the black waistbelt is worn under the coat, its black slings supporting a gilt-mounted *épée* with black leather scabbard fitted gilt, and a gold knot. The black bicorn appears quite plain.

G1: Officer, Artillery, c.1813
This depicts the uniform of artillery officers at the end of the Napoleonic Wars: basically the same coat, in 'roe-deer brown', but now with proper turnbacks of the style worn by other armies, though it is possible that the previous fashion, without turnbacks, continued in use. The hat is worn 'athwart', though contemporary portraits show that the 'fore-and-aft' style was equally popular. The sabre illustrated here is shown by Klein: apparently a *Pallasch* of the type carried by heavy cavalry, with a pierced disc hilt.

G2: NCO, Artillery, 1814
This junior NCO wears the later pattern of artillery jacket, which had six buttons on the breast, re-styled pocket flaps with three buttons in place of the previous single button, and turnbacks slightly reduced from those worn in the pre-1808 period. It is clear that the change in style was not universal, as contemporary illustrations show both the six- and earlier ten-button jackets being worn concurrently. The man illustrated has an oilskin waterproof cover over his bicorn, which thus conceals the decorations and rank-lace; though the cane suspended from a jacket-button was another symbol of rank. The decoration worn on the breast is the Medal of Valour, awarded to NCOs and men for outstanding service or heroism, in two classes, gold and silver, with red and white striped ribbon.

G3: Gunner, Artillery, service dress, 1814
This figure is based in part upon an illustration by J. A. Klein, showing the standard greatcoat coloured like the jacket, with a red collar (and sometimes shoulder straps), double-breasted with two rows of five brass buttons on the breast, three

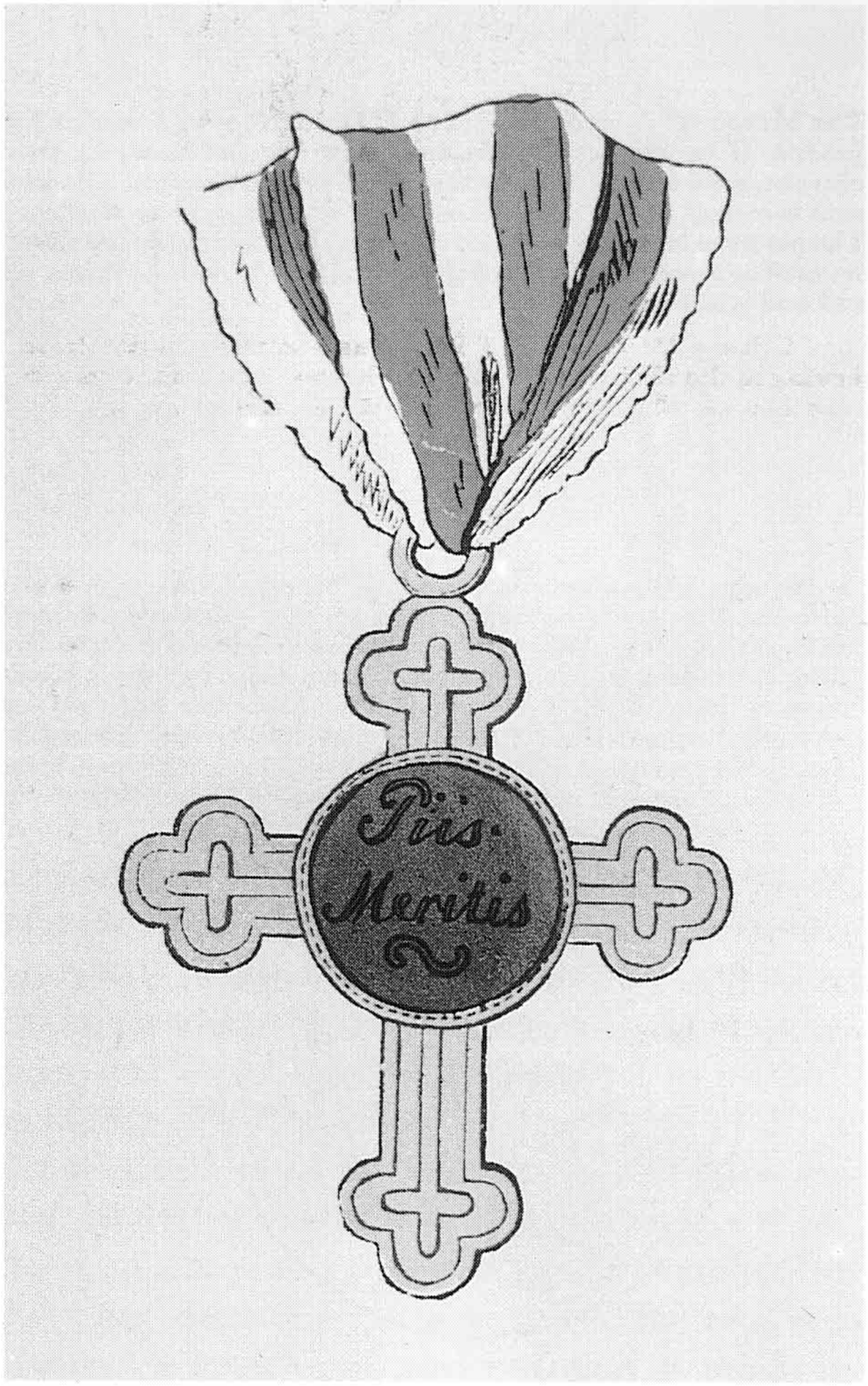
The Medal of Valour (or Medal of Honour) was founded by Joseph II to reward NCOs and men for heroism, in two classes, gold and silver, possession of which brought a 50 per cent increase in pay and lifetime half-pay for gold medallists. The obverse bore the portrait of Joseph II, the reverse a laurel wreath around *Der Tapferkeit* ('for valour'), with a ribbon of red and white stripes.



on each vertical pocket flap on the rear skirts and two on each cuff; buttons bore the same insignia as those on the jacket. The red cuffs shown by Klein are a variation on the usual brown. The ordinary greatcoat was voluminous and long, though apparently a shorter version existed, in the same colouring but closer-fitting and resembling the officers' *Oberrock*.

G4: Gunner, Artillery, 1814
This gunner shows the rear of the later-pattern jacket, with three-button pocket flaps and two vertical lines of piping on the rear skirts. The boots are shown in contemporary illustrations of the later period with a slightly cut-away portion below the back of the knee instead of being completely square-cut at the top—though as with the jacket, this later style is shown concurrently with the earlier pattern. The 'holster' of equipment continued to be worn on a shoulder belt, and another practice shown in contemporary illustrations appears to be the carrying of a portfire alongside the sword scabbard, perhaps attached to a jacket button in the manner of an NCO's cane, though presumably this would normally be carried only by selected members of a gun-team.

The Cross of Honour for Military Chaplains was founded by Francis II in November 1801, for heroic conduct on active service: a gold cross with blue-enamelled centre inscribed *Piis Meritis*, on a ribbon of red and white stripes.



H1: NCO, Pioneers, 1813–14
This uniform based on a Klein illustration includes a number of interesting features, notably the NCO rank marking of wide lace edging to the hat (and apparently a white-edged pompon), and a woollen sword knot; as sergeants in the Austrian army carried sword knots of mixed yellow and black, presumably the man depicted is a corporal. The jacket is of the later pattern, in the standard colours of light grey-blue with light green facings and piping on the rear skirts and shoulder straps, with re-styled turnbacks (slightly slimmer than before), and three-button pocket flaps piped light green in place of the earlier single-button variety. The legwear are one-piece gaiter-trousers, and the sabre an iron-fitted grenadier-style weapon.

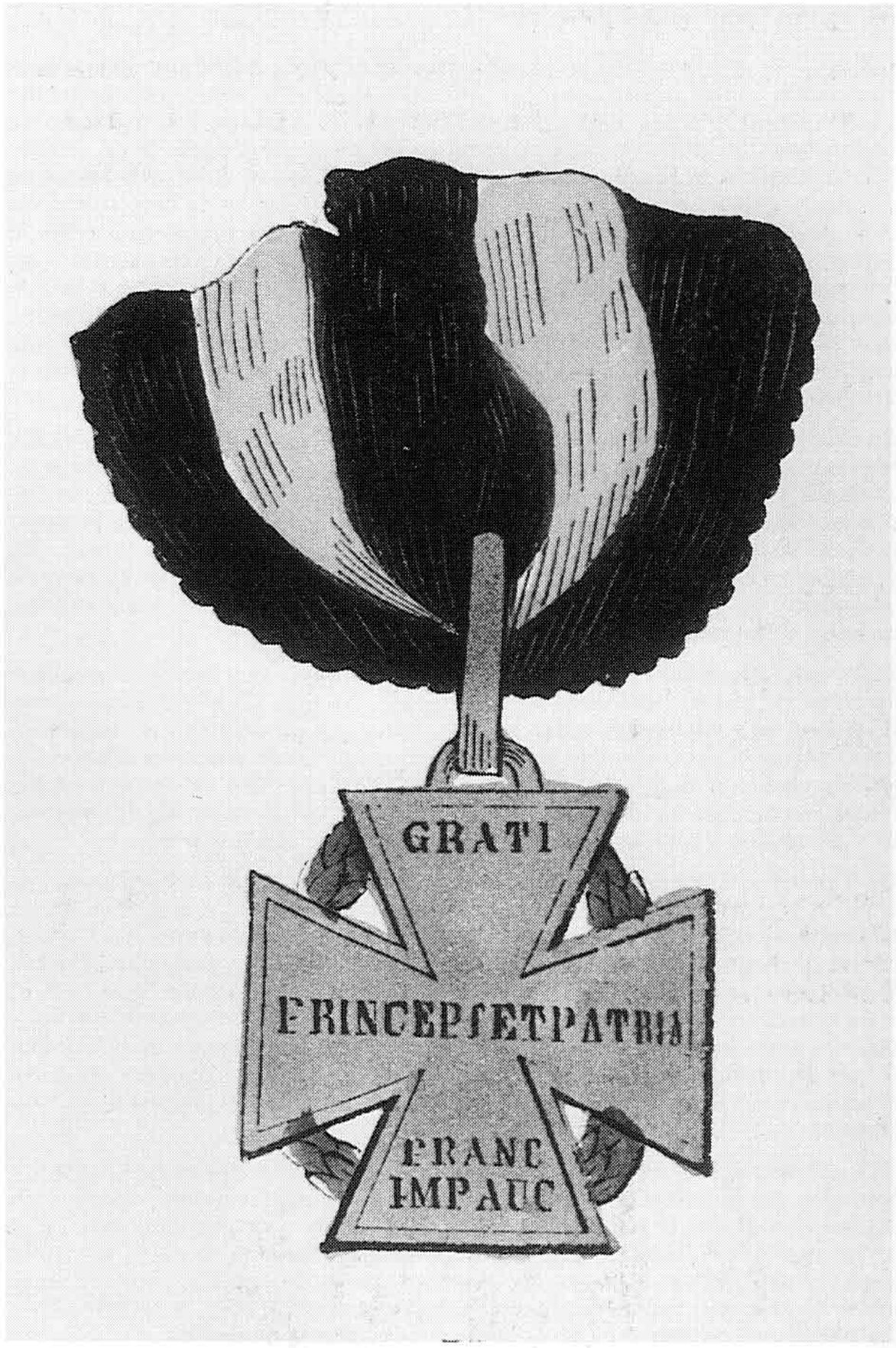
H2: Pioneer, 1813–14
The uniform shown here is in regulation style, though it is interesting to note that Klein depicts a hat with the right brim upturned in place of the more usual left; it has black ties over the top. The legwear is that of 'German' infantry, including black gaiters; and though the equipment is infantry-pattern, the sabre is a straight-bladed weapon without a knuckle bow, brass backstrap and quillons and black leather grip. The plume of somewhat drooping feathers is a style shown in contemporary pictures of the later period, contrasting with the upright plumes represented earlier.

H3: Pontooneer, 1813–14
Although some illustrations (including Ottenfeld) show the Pontooneers wearing the same colour of jacket as the Sappers and Miners, most contemporary illustrations show a darker, stronger blue as depicted here. The *Corséhut* is standard for this

period, with a tall upturned brim bearing a brass anchor, and the equipment is like that of the infantry. The boots shown in some depictions of the 1813–14 period have the same lower backs as the contemporary artillery boots, though it is evident that this pattern was worn concurrently with the square-cut type. Klein shows a member of the pontoon train with a saddle-horse which appears to have 'German' cavalry harness, a completely plain and undecorated red shabraque with square-cut front corners and pointed rear, and a black sheepskin saddle cover.

H4: Infantry 'craftsman', 1814

Each regiment had a number of specialist personnel—armourers, blacksmiths, saddlers, etc.—who formed part of the staff of each unit. This figure is taken from a Klein illustration of the mobile forge of Infantry Regt. No. 2 (Hiller), the craftsmen wearing a working dress consisting of ordinary legwear (light blue Hungarian breeches and ankle boots, though overalls are also shown), waistcoat, leather apron and the baggy cloth cap with integral peak which appears as undress headdress in numerous contemporary pictures.



The Military Decoration of 1814 was awarded to all those serving in the 1813–14 campaigns: a bronze cross upon an oak wreath, with a black ribbon with central yellow stripe.

Sources

Many sources were listed in the previous Men-at-Arms titles (176, *Austrian Army of the Napoleonic Wars(1): Infantry*; 181, *Cavalry*). *Napoleon's Great Adversaries: Archduke Charles and the Austrian Army* (G. E. Rothenberg, London 1982) remains invaluable as the most outstanding work in English. Especially useful for coverage of the 'specialist' elements of the Austrian army is the artwork of 1813–15 by Klein, published in *Johann Adam Klein: Osterreichische Soldatentypen* (ed. and with a text by U.-J. Friese, Hamburg, 1985). *Die Oesterreichische Armee* (R. von Ottenfeld & O. Teuber, Vienna 1895) is still the most significant work on Austrian uniforms; an excellent modern series of plates including Austrian subjects is *Ceux qui bravaient l'aigle*, by P. Courcelle. Austrian weapons are featured in *Cut and Thrust Weapons* (E. Wagner, Prague & London, 1967/69); and much interesting material continues to appear in the periodical *Empires, Eagles & Lions* (Cambridge, Ontario), for example the series *Development of Austrian Artillery 1772–1815* by Ray Johnson, 1981. The engravings of Austrian decorations and medals are from *The Book of Orders of Knighthood and Decorations of Honour* (ed. Sir B. Burke, London, 1858).

Notes sur les planches en couleur

A1 D'après une gravure de 1800 environs par Seele; l'uniforme des années antérieures à 1798 se portait encore. Le manteau de style officier porté avec des guêtres plutôt que des bottes pourrait indiquer le grade de Feuerwerker. Le second baudrier servait probablement à porter une boîte d'outils de canonnier. Notez le galon de grade de sous-officier sur le chapeau rond. **A2** Manteau d'officier de style infanterie, sans les retroussis à cette date, porté sans parements avec ganse et sans ceinturon, qui indiqueraient un grade supérieur à celui de capitaine. Notez la plaque de casque d'officier avec le chiffre impérial. **A3** D'après Seele; veste de style infanterie dans les couleurs de l'artillerie, portée avec des culottes brunes peu courantes au lieu de blanches, et sabre inhabituel sans garde. **A4** Uniforme réglementaire de 1798; le casque pour les artilleurs avait une crête rouge et un insigne de tube de canon sur la plaque. Il a un sabre, une boîte d'outils et sa capote est roulée.

B1 D'après une gravure de Mansfeld. Les officiers ne portaient pas de brassards; le grade de cet officier supérieur est indiqué par le large galon sur le bandeau du chapeau. Etant donné qu'ils n'avaient pas entièrement un statut d'officier, les officiers de ce corps no portaient pas la ceinture d'étoffe. **B2** Notez le brassard pour le service de transport; et à cette date un chapeau très simple. **B3** L'uniforme de 1798 était généralement semblable à celui de l'infanterie allemande, en gris avec des liserés verts et des boutons blancs, mais avec un mélange d'équipement personnel de type grenadier et fusilier.

C1 D'après Mansfeld – l'uniforme distinctif de ce corps, avec veste sans queue et col retourné, parements à pointes et reverse à "triangle". **C2** D'après un portrait d'époque: les couleurs apparaissent plus claires que les descriptions réglementaires, et les différences étaient certainement considérables parmi les officiers. Le plumet verdâtre, au lieu du noir réglementaire, se voit bien sur ce portrait. **C3** Notez les couleurs réglementaires, contrastées de cet uniforme. **C4** L'uniforme de 1798 est décrit comme étant "couleur bleuet" on "gris brochet".

D1 Tenue caractéristique du milieu de l'ère napoléonienne, avec le bicorne de 1806. Il pouvait être couvert d'un manchon de toile cirée noire; et se porter suivant des angles différents: en présentant les deux côtés, ou l'arrière à l'avant, ou même diagonalement, ce qui semble avoir été un choix personnel. **D2** Les liserés bleus clairs distinguaient ce corps de l'artillerie qui portait l'équipement et les armes de l'infanterie ainsi que le bricole. **D3** En partie d'après Klein: veste blanche avec liserés jaunes portée à partir de 1803–05 environ, mais le shako n'était pas utilisé universellement. **D4** Dos de la veste d'artilleur de cette époque, avec retroussis de jupe de dimensions plus petites, et poches à trois boutons.

E1 Le chapeau rond a maintenant évolué pour devenir le vrai Corséhut. **E2** Les Mineurs, qui portaient le même uniforme de base que les Sapeurs avaient un équipement distinctif; pas de mousquet, mais un sabre, un pistolet avec étui, et un lourd outil de tranchée. **E3** Les Pionniers, reconstitués en 1806, portaient alors le vrai Corséhut. Equipés officiellement comme l'infanterie, les fournitures vinrent à manquer quand leur nombre fut augmenté en 1813, le 2nd Bataillon était équipé de carabines de la cavalerie et de courtes baïonnettes.

F1 D'après un portrait célèbre de l'Archiduc Charles, en partie, avec ajout du bicorne à galon doré. Il porte l'étoile de poitrine de l'Ordre de Marie Thérèse, et l'écusson de l'Ordre de la Toison d'Or sur un ruban attaché à la boutonnière. **F2** L'Oberrock vert avec liserés noirs et doublure rouge était tenue de service courante, ici avec le galon de grade d'un officier supérieur. **F3** D'après Klein, 1815 – une variante de la tenue réglementaire d'officier, mais portée ici avec des pantalons de fatigue gris foncés de la cavalerie.

G1 Le manteau a maintenant de vrais retroussis; et Klein montre comment était utilisé ce lourd sabre Pallasch de la cavalerie. **G2** Le dernier style de veste, avec six boutons sur le devant et trois sur les poches, et des retroussis plus courts; le style antérieur continuait à se porter. Bien que les distinctions sur le bicorne soient cachées par le manchon en toile cirée, la cane reste une marque de grade. Notez la médaille de Mérite pour les sous-officiers et les soldats. **G3** Capote réglementaire, hormis les parements rouges inhabituels. **G4** Le dos de ce modèle de veste plus récent. Quelques membres servant les pièces de canon portaient un boutefeu à côté de leur sabre.

H1 D'après Klein: il s'agit probablement d'un caporal, étant donné le large galon sur le chapeau et le pompon à liseré blanc, et qu'il ne porte pas la dragonne jaune et noire d'un sergent. **H2** Uniforme réglementaire, bien que Klein montre l'aile droite du chapeau et non pas la gauche, relevée, et le sabre droit est inhabituel. Le plumet retombant serait caractéristique de la période postérieure. **H3** Bien qu'Ottenfeld et d'autres peintres montrent la même veste pour les Sapeurs et les Mineurs, d'autres sources la présentent dans ce bleu plus soutenu. **H4** D'après une étude par Klein de la forge mobile du Régiment N°2 d'Infanterie – un artisan en tenue de travail.

Farbtafeln

A1 Ein Druck von Seele ca. aus dem Jahre 1800. Die Uniform, die vor 1798 benutzt wurde, wird immer noch getragen. Ein Offiziersmantel mit Gamaschen, anstelle der Stiefel deutet vielleicht auf den Rang Feuerwerker. Am zweiten Schultergürtel war wahrscheinlich die Werkzeugtasche des Kanoniers befestigt. Auffallend ist die Ranglitze an der runden Mütze des Unteroffiziers. **A2** Mantel eines Infanterie-Offiziers. Zu dieser Zeit fehlten Rockaufschläge, geschnürte Manschetten sowie Gürtel, die von einem Kapitän getragen worden wären. Auffallend ist das Helmschild – mit königlichem Monogramm – des Offiziers. **A3** Eine Infangeriejacke nach Seele in den Farben der Artillerie, die mit den ungewöhnlichen braunen Breescheshosen getragen wurde, anstelle des weißen, ungewöhnlichen Säbels ohne Gelenkschützer. **A4** Vorschriftsmaßige Uniform aus dem Jahre 1798. Der Helm in der Artillerie besaß ein rotes Wappen mit Kanonenlauf als Monogramm. Er verfügt über einen Säbel, eine Werkzeugtasche und einen aufferollten Mantel.

B1 Ein Druck nach Mansfield. Offiziere trugen keine Armbinde. Der führende Offiziersgrad wurde durch eine breite Litze am Hut gekennzeichnet. Offiziere ohne den gesamten Offiziersstatus dieses Korps trugen keine Schärpe. **B2** Zu beachten ist die Armbinde der Transporteinheit, und der einfache Hut zu dieser Zeit. **B3** Die Uniform von 1798 war im allgemeinen der deutschen Infanterie ähnlich. Sie hatte graues Futter, weiße Knöpfe, eine Mischung aus Füsilier-und Grenadier-Ausrüstung.

C1 Diese besonders auffallende Korps-Uniform ist von Mansfeld; Jacke ohne Schwalbenschwänze mit umgeschlagenen Kragen, spitz zulaufenden Manschetten und "dreieckigen" Revers. **C2** Von einem zeitgenössischen Porträt. Die Farben sind schwächer als in den Vorschriften beschrieben und unterschieden sich wahrscheinlich beträchtlich unter den Offizieren. Die grüne anstelle der schwarzen Feder ist deutlich auf dem Porträt zu sehen. **C3** Zu beachten sind die kontrastierenden, vorschriftsmäßigen Farben dieser Untertanenuniform. **C4** Die Uniform von 1798 wurde verschiedentlich als "Kornblumenblau" oder "Hechtgrau" beschrieben.

D1 Typische Bekleidung mit Zweispitz aus dem Jahr 1806 während der mittleren Jahre der napoleonischen Ära. Dies wurde mit einem schwarzen Ölumhang getragen, und zwar von Seite zu Seite, vorn nach hinten oder diagonal. Es war dem persönlichen Geschmack überlassen worden. **D2** Das hellblaue Futter unterscheidet diesen Korps von der Artillerie. Sie trugen Infanterieausrüstung und Waffen sowie den Bricole. **D3** Zum Teil nach Klein: weiße Jacken mit gelbem Futter, die ungefähr zwischen 1803–05 getragen wurden. Der Tschako wurde nicht überall benutzt. **D4** Hinteransicht einer Artilleriejacke aus dieser Zeit, mit verkleinerten Rockaufschlägen und Taschen mit drei Knöpfen.

E1 Der runde Hut hatte sich in den echten Corséhut weiterentwickelt. **E2** Die Mineure trugen die gleiche Grunduniform wie die Sappeure mit ihrer besonderen Ausrüstung; keine Muskete, aber einen Säbel unde eine Pistole im Halfter sowie schwere Werkzeuge zum graben. **E3** Die Pioniere, die 1806 wieder eingeführt wurden, trugen nun den echten Corséhut. Offiziell wurden sie wie die Infanterie ausgerüstet, aber bei der Vergroßerung im Jahre 1813 verfügten sie nicht über ausreichende Austü-stung. Das 2. Bataillon hatte kavallerie-Karabiner unde kurze Bajonetts.

F1 Teilweise vom bekannten Porträt des Erzherzogs Charles, mit der Hinzufügung des Zweispitzes mit goldenen Litzen. Er trägt den Bruststern des Maria Theresia Ordens und das Abzeichen des Goldenen Vlieses an einem Band von seinem Knopfloch. **F2** Eine häufig getragene Dienstuniform war dieser grüne Oberrock mit schwarzen Aufschlägen und rotem Futter; hier mit der Ranglitze eines führenden Offiziers. **F3** Nach Klein, 1815 – beruhend auf der vorschriftsmäßigen Infanterie-uniform der Offiziere von 1811, die hier mit dunkelgrauen Kavalleriehosen getragen wurde, die an den Außennähten entlang der Beine geknöpft wurde.

G1 Der Mantel hat nun echte Rockaufschläge. Klein zeigt die Verwendung dieses schwaren Pallaschsäbels der Kavallerie. **G2** Der spätere Jackenstil mit sechs Knöpfen vorn und drei an der Tasche sowie verkleinerten Aufschlägen; der alte Stil wurde aber weiterhin getragen. Obgleich die Merkmale des Zweispitzes durch den Ölumhang verdeckt sind, verblieb der Stab ein Rangabzeichen. Auffallend ist die Tapferkeitsmedaille der Unteroffiziere und gemeinen Soldaten. **G3** Nach Klein – der vorschriftsmäßige Mantel, mit der Ausnahme der ungewöhnlichen roten Manschetten. **G4** Hinteransicht des späteren Schnittmusters der Jacke. Langsam brennende Zünder worden von einigen Besatungzmitgliedern der Kanoniere neben dem Säbel getragen.

H1 Von Klien; dies ist wahrscheinlich ein Obergefreiter, da er eine breite Hutschnur und einen weißkantigen Pompon trägt, aber keinen gelben und schwarzen Feldwebelschwertknoten hat. **H2** Vorschriftsmäßige Uniform, wobei Klein eher die rechte als die linke Seite der hochgeklappten Hutkrempe und den geraden ungewöhnlichen Säbel zeigt. Die herunterhängende Feder scheint später charakteristisch zu sein. **H3** Obgleich Ottenfeld und andere dieselben Sappeur- und Mineurjacken darstellen, zeigt diese Abbildung ein dunkeleres Blau. **H4** Eine Studie von Klein beim Vorauskämpfen des 2. Infanterieregiments – ein Handwerker in Arbeitstracht.

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Avec annotations en francais sur les planches en couleur.
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